Lecture

INTRODUCTORY TO A COURSE OF

CLINICAL STUDY OF DISEASES OF WOMEN.

Delivered at St. George's Hospital,

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(*Reported by* DR. FANCOURT BARNES.)

GENTLEMEN,—The method of clinical study is the same for all diseases, for all regions of the body. The body is a whole, made up of mutually dependent parts. The fable of Menenius Agrippa was not more true in its application to the body politic of Rome than it is to-day in its application to the body of medical science, and to the body of man or woman upon whom the medical art is exercised. The indivisible unity of the parts of the body is seen, first, in the circulation. This is one: blood goes from the same source everywhere to every organ. If any organ is disordered, there results infallibly dynamic derangement, or tissue or nutrition disorder, which affects the quality of the whole mass of the blood. This indivisibility is again seen in nervous action. The nervous system is a whole. Disturbance of an organ entails nerve disorder, and the nerve-centres are affected; the whole organism feels the blow. Disease may be, in its origin, local or general; that is, it may begin in an organ or tissue or in the blood. But whatever the original disease, be it local or general, the whole body and each individual organ and tissue is liable, sooner or later, to be affected in its structure, and therefore disordered in its function. In the case of original local disease, the organ or part primarily affected may for some time exhibit the most prominent change of structure and disorder of function. But this is not always true throughout. The organ first affected may not be one of vital importance. But, starting from an organ of secondary importance, the disease invades other organs in their structure, or impedes them in the performance of their functions. In this manner the primary seat of the disease may become masked. For example, cancer of the neck of the uterus, so long as it is limited to that region, may not be of vital consequence. Like the breast, it may be amputated. But let cancer spread to the bladder or rectum or glands, and the secondary conditions may kill. So far as the general pathology of cancer, tumours, struma, and allied diseases is concerned, what applies to these diseases, when they invade the ovaries and uterus, equally holds good when they invade other parts. The differences that call for particular study are essentially clinical; in one sense they might be called accidental. Thus, if cancer attack the stomach, it will, according to its kind and the region of the stomach attacked, cause—(1) disturbance of the function of the stomach; (2) disturbance by pressure or by extension to neighbouring parts, inducing disorder of function of those parts; (3) infection of the glands, bloodvessels, and the blood itself. Just so it is when cancer affects the uterus. The disease will produce certain clinical variations according to the nature and importance of the functions of the organ first attacked and to the nature and importance of the functions of the immediately associated or adjacent organs. This, then, is the key to the special pathology of the ovaries and uterus in so far as general morbid processes are concerned. But inasmuch as the ovaries and uterus have special functions to perform, have particular relations of function and position with other organs, and are themselves endowed with certain properties, of which I may now specify mobility, and variations of size and shape, we have to investigate the pathology of the ovaries and uterus from distinct, special points of view, medical and surgical.

Now, it is my duty to tell you that ovario-uterine pathology, both general and special, are too much neglected by the general body of physicians and surgeons. No doubt this study is beginning to be better appreciated than it was twenty or thirty years ago. But there are still men of deserved eminence who seem to think that the domain of pathology is limited by a line drawn between the anterior superior spinous processes of the ilia, and that all below that line is unworthy of their attention—a deplorable error, pernicious in its consequences. It retards the progress of general medicine; it excludes the possibility of rightly appreciating the significance of many clinical phenomena. It incapacitates those who are under its dominion from forming a right, even a candid, estimate of the professional merits of those who study and practise that branch of medicine to which the awkward word "gynæcology" is applied.

I have taken several occasions to show that the solution, or the most instructive illustrations, of many of the most interesting problems in general pathology, as fever, thrombosis, acute jaundice, glycosuria, albuminuria, pigmentation, convulsions, chorea, and other nervous disorders, will be found in the study of menstruation and pregnancy. In the whole range of physiology and pathology no such instructive opportunities of studying the play of the excito-motory system are found. This luciferous source of knowledge is practically repudiated. And it follows that science and humanity suffer. Ignorance may be bliss, but it is not the best foundation of the healing art. We cannot afford to neglect any source of knowledge. Medicine cannot be successfully studied bit by bit. Fragmentary medicine, maimed and imperfect, is the outcome of specialism. The real specialist is he who studiously fixes his attention upon one organ or tissue, ignoring the rest. But he is scarcely less a specialist who specially neglects the conditions and reactions of any organ of the body.

Let us now discuss the mode of diagnosis. That we may form a diagnosis it is essential that we possess a theoretical knowledge of disease. We must find out what the patient suffers from if we want to relieve him by rational well-directed treatment. If it were true that every disease has its specific remedy—an exploded notion,—it would still be necessary to find out the disease in order to meet it by its appropriate remedy. And if we could not discover the disease, we might still, on the good old empirical plan, make a shot at it by firing into it a volley of remedies, counting that perchance one amongst them would hit the doubtful mark. "Every bullet has its billet" should be the maxim of the empirical practitioner. Since, however, we are not always able to realise the first rational indication, to detect the disease, we may for a time fall back upon the plan of observing how the whole system labours, and how any particular function is in difficulty. This will furnish a provisional indication in treatment. Medication on this principle is usually safe, and ought to be safe. Two or three rules of practice will carry you a long way. Thus, when in doubt, give salines. There is hardly any disease in which salines will not do good at the beginning. There is hardly any disease in which they will do harm. By giving salines you gain time for observation, for finding out the more precise indications for treatment. The next rule—it ought perhaps to be the first—is, enjoin rest. The Pharmacopœia contains no remedy of so much value, of such universal application. In addition to its other advantages, it has the merit of giving time for leisurely observation. The third rule might be to relieve any organ suffering from difficulty in the performance of its function. But this rule requires to be followed with great discretion. For example, it is not always wise to purge because the bowels are not relieved. On the contrary, opium may be indicated, as in intussusception. And you may often greatly relieve one disabled organ by inducing other organs to do at least a portion of its work. If you observe these three precepts, you will fulfil the fourth great maxim—the maxim, great in its positive good because great in its negation of harm, laid down by Hippocrates: If you do not see your way clearly to do your patient good, take care at least that you do him no harm.

Your first interview with your patient is your opportunity. A mistake made at this critical moment may damage yourself as well as him; and he may give you no opportunity of retrieval. Later on you may make a mistake, and the consequences, to yourself at least, may be less difficult to get over. Take care, then, of your first step. Start quietly; proceed warily. Do not put your faith in intuition. Distrust those who "see through a disease at a glance." They are shallow people, and are easily seen through themselves. The motto of the true physician is "Thorough."

Now we may proceed to diagnosis. Guided by the principle that when a part of the body is diseased the whole suffers, we must examine the condition of the body in its parts and as a whole. This makes it necessary to examine

with method. What is the best method? I do not think myself competent to say. But I can point out one which will fairly answer in practice. The history, diathesis, inherited or acquired, and the antecedent diseases stand on the threshold of the inquiry. These disposed of, examine the functions and organs in a certain regular order:—(1) Aspect, plumpness, colour and state of the skin generally; (2) the circulation, pulse, respiration, and temperature; (3) nutrition, the tongue, appetite, digestion, stomach, intestines, defecation, and bile; (4) the urinary organs, the kidneys and bladder, as to pain, as to retention or other characters, as well as the characters of the urine itself; (5) the nervous system, sleep, motor power, general languor or exaltation, excito-motory system, mental state, delirium, pain, and its seat and kind; (6) In women, the sexual organs, the menstrual function, child-bearing, and the secretions.

All these phenomena should be, as far as possible, explored by the aid of manipulation, and the appropriate instruments of exploration. It is a dangerous thing to form a subjective diagnosis; it is a dangerous thing to accept your diagnosis from the patient. Until recent times, however, all diagnosis of uterine disease was subjective. The result was hopeless ignorance, causing disastrous errors. And so it was to a great extent in nearly all diseases before the stethoscope, thermometer, sphygmograph, test-tube, and microscope came into practical use.

The advantages of pursuing some such method as that which I have just pointed out to you are—1. You are not so likely to overlook what you are in search of. 2. You will not seldom detect complications; that is, associated diseases in addition to that, the most obvious and apparently urgent one, which, as the French say, "*saute aux yeux.*" 3. You avoid the serious mistake of going over the ground two or three times—of beating about the bush. It gives a bad impression to your patient if you ask him the same question two or three times, when he has already answered it. He will be apt to conclude that you are talking at random, and have no clear idea of what you are about.

You may ask, why have I, who am specially called upon to aid you in studying gynæcology, touched upon all this? Simply because there is, in truth, nothing more special in gynæcology than there is in the study of heart disease, lung disease, or any other disease. All disease must be studied on the same principle and after similar methods. A long process, you will say. But practice enables one to go through much of this long inquiry quickly, and in the course of other inquiries.

Lettsomian Lectures
ON THE
SURGERY OF THE FACE.

Delivered at the Medical Society of London, February 1878,

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LECTURE III.—PART I.
DEFORMITIES OF THE FACE.

MR. PRESIDENT AND GENTLEMEN,—Having briefly disposed of the diseases and injuries of the face, I purpose, with your permission, in this, my concluding lecture, to describe some of the principal deformities that are met with in this region, with their appropriate treatment. I shall pass over such congenital malformations as do not come within the scope of the surgeon's art; those I mean that would be generally classified as monstrosities.

In a paper "On the Relation of the Teeth and Mouth to Mental Development,"[1] Dr. Langdon Down lays stress on the characteristic features of the lips in congenital idiots. The lips, he says, are usually thick, the thickness being greatly more marked in the lower than in the upper one. In addition to the thickening they are often striated and marked by transverse fissures. They are frequently deficient in muscular power, and the want of muscular action interferes with their prehensile function, and also induces a tendency for the saliva to run over the chin. The mucous membrane is extremely liable to chronic inflammation, and ulceration is induced by the slightest pressure against prominent or uneven teeth. The glands of the mucous membrane of the mouth generally, as well as the salivary glands, are usually hypertrophied. Again,[2] he speaks of certain semilunar folds of skin at the inner canthus of the eye—folds which, he believes, are more frequently present in feeble-minded children than in others, and which he describes as epicanthic folds. They are, according to his experience, marks of developmental degeneracy, and should always be looked for in doubtful cases. Then he remarks that the seat of implantation of the ear in idiots is usually placed further back in relation to the head and face than in normal children. The mouth is arched or gothic-shaped; the tongue is increased in size. It is rugous, fissured, and its papillæ are enlarged. Again, the angle of the jaw is more obtuse than usual.

Perhaps the commonest observable congenital deformity of the face is harelip. Having written so recently on this subject, I have little to add to what has been already published; but I may be permitted to dwell for a moment on one or two points in connexion with this deformity.

1st. Respecting the intermaxillary or premaxillary bones. I think there can be no doubt that when harelip is associated with a fissure of the hard palate, the fissure takes the place of the lateral incisor tooth of one or both sides, as the case may be. In other words, the lateral incisor is usually wanting. Figures 21 and 22 indicate these points, but the actual specimens, which I hand round, and some of the photographs, I think, put the matter beyond doubt.

FIG. 21.

FIG. 22.

It is extremely rare to find a case of double harelip with no fissure of the palate whatever, but such a case is now under the care of my colleague, Mr. Croft, at St. Thomas's Hospital.

2nd. The hereditary character of harelip is occasionally very striking. Thus Dr. Buck[3] gives an account of a family in which there was a very remarkable hereditary history:—"Mrs. Molinieri and her three children (all girls) came under his notice in January, 1871. The mother herself bore the marks of a successful operation for harelip performed in childhood. She had a brother and sister with harelip; and besides the three living children above referred to, she had had four others, who had all died in early infancy; three of these had harelip, and the fourth one only was a perfect child. In other words, there were nine instances of the deformity in two generations of a single family."

3rd. I may be permitted to make one or two practical remarks respecting the method of operation. The harelip pin with the twisted suture is very commonly employed to bring the edges together, but, without entirely discarding this method of approximating the parts, I feel sure that the usual interrupted suture of silk may in most cases be employed with great advantage, and I believe, with certain precautions, it is in many instances preferable; but whether the twisted or interrupted suture be used, the success of the operation mainly depends, first, on the soft parts being thoroughly freed from the subjacent bone; secondly, on the edges of the fissure being so pared that a good broad raw surface is left; and thirdly, that the patient be incessantly watched for three or four days by a skilled nurse, who should support the newly united surfaces by making continuous but gentle pressure on each cheek. I have little confidence in the use of mechanical appliances *after* the operation; for in nursing the child they are apt to shift their place, and often do more harm than good. They are, however, invaluable as aids in bringing the two superior maxillæ together if worn *before* operative procedure is undertaken. Again, strapping is of especial service before the operation, but afterwards it cannot be with safety solely relied on.

Besides the ordinary forms of harelip, fissures of the lips extend in other directions. Thus Mr. Ward describes a

[1] Trans. Odontological Soc., vols. iii. and iv., 1871-72, p. 14.

[2] Trans. Obstet. Soc. of London, vol. xviii., 1876.

[3] Reparative Surgery, 1877, p. 130.

case[4] in which the fissure extended into the right cheek; and another more remarkable case is recorded[5] in which a boy was born with a very large mouth. At seventeen years of age his mouth was six and a half inches in diameter, extending from one ear to the other, so that the tongue always hung between the teeth. Langenbeck operated on the lips and brought the parts together. Another remarkable example is reported by M. Guersant, in which the fissure on each side extended towards the eyelids.

The mention of harelip almost necessitates a few words on fissure of the palate, of which several varieties are exhibited in the woodcuts I here show you. It is, however, extremely rare to meet with a case of fissure of the soft palate with an entire absence of the uvula, but such a case I have had the opportunity of showing you to-night; and on the subject of cleft palate I confess I have little to add, excepting that, in closing the hard palate, I usually perform the muco-periosteal or Langenbeck's operation. Dieffenbach's plan of dividing the entire bony palate with a chisel, and which was introduced into this country by the late Sir W. Fergusson, has the disadvantage that it is sometimes accompanied by exfoliation of bone; but this untoward result may to some extent be obviated by boring a few holes with an ordinary bradawl in the line in which the chisel is to be applied—a plan I suggested in THE LANCET of October 24th, 1874. Whichever operation is selected, the closure of the hard palate is often attended with troublesome hæmorrhage, but the bleeding may be instantly arrested by plugging the wounds on each side with dry lint, after which the operation may be completed without difficulty. I referred to this practice in THE LANCET of July 29th, 1876, p. 170. Severe bleeding of an intermediary or secondary character occasionally, but very rarely, occurs. Such a case has been recently reported by Mr. Marsh.[6]

The chief object of the operations for cleft palate is, of course, the improvement of the voice. I need not refer to my views on the subject further than to say that a cleft in the soft palate is not a mere rent or slit in the parts, but is an actual deficiency or want of tissue. Hence, after the edges of the soft palate are bound together, the part remains as a tight curtain, stretched between the mouth and posterior nares. The result is that, in speaking, the air, instead of passing into the mouth, gains access to the nostril, and thus the peculiar nasal twang is maintained. I therefore venture again to recommend the performance of a very slight operation, an account of which I published in 1869.[7] It should be understood that this procedure is an entirely independent operation, and should be performed only when the surgeon is perfectly satisfied that firm union has taken place. The incisions on each side release the part, and the palate is, so to speak, converted into a huge uvula.

Besides congenital defects of the superior maxillæ and the palate bones, there are cases recorded of deficiency in other bones about the face. Thus Delpech[8] gives a description of a patient who had a congenital absence of the right nasal and lachrymal bones, the nasal process of the superior maxillary, and of the soft parts.

Again, Dr. Samelson exhibited at the Manchester Medical Society a patient, aged twenty-three, who had a congenital defect of the frontal bone. There was a somewhat thickened integument extending over a cavity produced by the absence of the bone. Within the gap the cerebral pulsation was very plainly visible.

Mr. Gay has favoured me with the notes of a case in which there was congenital absence of the nasal bones. The rough sketch I send round will afford some idea of the condition of the parts. And Mr. Bryant, in his work on Surgery (vol. i., p. 236), refers to a case of Mr. Poland's, of meningocele, which caused a considerable prominence over the nasal bones.

Dr. Lichtenberg also reports a remarkable instance of a congenital tumour which protruded through the mouth of a newly born babe. The growth overlapped the chin, and rested with its base on the sternum. From the appearance, Dr. Lichtenberg believed the case to be one of polypus, and put on a ligature as tightly as possible, and cut off the tumour. Three or four days after the patient died of convulsions. At the post-mortem examination the pedicle of the tumour was found to perforate the sella turcica, and was there attached to an oval tumour which was connected with the brain.[9] Such a case as this should make us remember that it is not always easy to pronounce a decided opinion as to the exact nature of a congenital tumour; and whilst I am on this subject, I may allude to an instance that was under the care of my former colleague, Mr. Arnott, which showed the difficulty of arriving at a correct diagnosis. There was a round sessile swelling, the size of a large walnut, situated just in front of the anterior fontanelle, in a child eight months old. The history of the case pointed very decidedly to the tumour being a meningocele. No operative treatment was adopted, but the patient died of broncho-pneumonia; and at the post-mortem examination the swelling proved to be a cyst of a dermoid character, and was quite unconnected with the interior of the skull. The mistake (adds Mr. Arnott) in this instance mattered little; but fatal errors have been committed by surgeons mistaking meningocele for simple dermoid cysts, and undertaking their removal.[10]

Again, Mr. Gay tells me he now has under observation a case in which there was a swelling, the size of a small walnut, situated at the front part of the left temporal fossa. The patient was seventeen years of age, and the swelling had become prominent for the last ten years. Mr. Gay believes he had discovered the true nature of the tumour by cutting down, but not into it, for rather severe symptoms followed the operation. No pressure on it, or other efforts to detect the real nature of the swelling, answered before exploration. The tumour was thought to be a meningocele.

4 THE LANCET, May 28th, 1859, p. 536.
5 Ibid., vol. xiii., 1827-28, p. 462.
6 Ibid., Jan. 19th, 1878.
7 Ibid., vol. ii., 1869, p. 198.
8 Ibid., 1829-30, p. 200.

9 Path. Trans., vol. xviii., 1867, p. 251.
10 Ibid., vol. xxv., 1874, p. 230.

ON THE SURGICAL TREATMENT OF INTESTINAL OBSTRUCTION, WITH TWO CASES OF ENTEROTOMY.

BY THOMAS BRYANT, F.R.C.S.,
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(Continued from p. 712.)

I WILL now read the two cases in which I have successfully performed enterotomy.

CASE 1. *Chronic intestinal obstruction; enterotomy; cure.* (Reported by Mr. Geo. F. Dixon.)—William B——, a stonemason, aged fifty-seven, was admitted into Stephen ward on the 5th February, 1877, under the care of Dr. Wilks, for constipation, sickness, and violent abdominal pain. His family history was good, and he himself had always been healthy until his present illness, which came on some six months before admission, with vomiting and violent abdominal pain; the abdomen also became hard and swollen. From this time up to Christmas these attacks recurred periodically, generally about once a week; the bowels being always constipated. Since Christmas the attacks had been more frequent—twice weekly or more. The vomit had a fæcal odour. He took many powerful purgatives, but none opened his bowels freely. On an average, he had a motion *naturally* about every four days.

On admission, the abdomen was a good deal distended, and on palpation the coils of distended intestine could be felt. The recti muscles were hard and resistant, as were also the abdominal walls. He had never passed blood, and nothing could be felt in the rectum. Lungs and respiration good. Bowels not open for three days.

Feb. 12th.—He had an injection every morning, but it did not seem to bring much away. A one-grain opium pill to be taken at bedtime.

26th. — Constipation still continued, with sickness; swelling of abdomen, and visible peristalsis of the small intestines. Ordered a quarter of a grain of extract of belladonna three times a day.

March 19th.—Has had some relief from the bowels, although during the last ten days he has suffered much. Ordered half a grain of extract of nux vomica, and half a grain of extract of opium, twice a day.

April 5th.—Has just passed through another of his attacks,

and had relief. Motion natural. To take his pills three times a day.

16th.—Has had another severe abdominal attack, which seemed as if it would be his last. Vomiting very severe. Bowels acted this morning after a week's constipation.

26th.—Another severe paroxysm of pain, following constipation of many days' duration, and attended with sickness and violent visible action of the small intestines.

29th.—Mr. Bryant, who had seen the patient on many occasions for Dr. Wilks, saw him again to-day as the attack had lasted four days without relief, and he came to the conclusion that life could only be saved by some operation, for each attack of abdominal pain and obstruction had been worse than the preceding, and the present was the worst of all. He decided also upon performing enterotomy in the right groin, as it seemed tolerably certain that the obstruction was neither in the colon nor rectum, but in the small intestines. The operation was performed after Nélaton's direction, as detailed by Trousseau in his work on Medicine, Lecture 77.

Operation.—The patient, having been brought under the influence of chloroform, was placed in the horizontal position, with the right thigh slightly flexed, and supported upon a pillow. An incision was then made about two inches and a half long, parallel with, and an inch and a half above, Poupart's ligament on the right side, and the soft parts covering the muscles divided. The muscles were then cut through layer by layer, and all wounded vessels twisted. Hæmorrhage having ceased, the peritoneum was exposed and carefully opened, a knuckle of distended bowel at once bulging into the wound. A small needle, armed with a fine silk thread, was then passed through the skin and the peritoneal coat of the intestine at the four corners of the wound, and the bowel carefully secured by four sutures. A curved, armed needle was next passed through the bowel itself, and the intestine opened to the extent of a quarter of an inch, the double ligature, which had been passed by the armed needle, being withdrawn through the opening made into the bowel, and the bowel stitched to the edge of the skin. The artificial anus was thus made. Mr. Bryant then passed a catheter up and down the intestine through the wound, to satisfy himself that all was right, on withdrawing which a small quantity of liquid fæces escaped. Temperature 97·6°; pulse 84. To take an opium pill every four hours.

30th.—The patient is very comfortable this morning, and well under the influence of opium; he has had no pain; passed some liquid fæces through the opening; takes nothing but milk. Temperature 98·4°; pulse 66.

May 2nd.—He was very comfortable; he took nothing but milk. The peristaltic movement of the bowels caused intense pain occasionally. Temperature 97·6°; pulse 74. There seemed to be no signs of peritonitis; the tongue was clean and moist, and pulse full and soft.

3rd.—He was not so well. The pain came on more frequently and was worse. He had passed liquid fæces through the opening. Temperature 99·3°; pulse 76.

4th.—The patient was in a great deal of pain, and did not sleep the whole of the night. He took jelly, beef-tea, and milk. He passed fæcal matter through the opening. Ordered to take ten drops of solution of hydrochlorate of morphia in half an ounce of camphor-water every six hours. Temperature 97·6°; pulse 70.

5th.—Patient said he felt much more comfortable. He had a little sleep in the night. The pain was not so bad, except on intestinal movement. Temperature 98·2°; pulse 76.

7th.—He is much the same. The fæcal discharge from the wound was very great, and the wound smarted "like fire." Temperature 99°; pulse 88.

8th.—Good union has taken place at the seat of the artificial anus, so the stitches were removed. The integument around the orifice is irritated by the feculent discharge. Oil on lint ordered as an application. Temperature 99·4°; pulse 88.

11th.—The man said he felt quite well, and that he could walk out of the hospital if allowed. The nature of the fæcal discharge has altered, having become more solid and of a light yellow colour. Solid food allowed.

16th.—Has been very cheerful since last report, and free from pain. He is, however, a sad grumbler, and makes the worst of matters.

26th.—Has had some pain in the abdomen during the last few days, apparently from motions in the colon. An enema per rectum gave relief, some scybala passing. The bowels acted again the next day, and a quantity of hard motion came away.

29th.—The man is now convalescent, and he was ordered to have a cup-truss made to apply over the artificial anus, to which a bag was attached to catch the fluid feculent discharges. He gets up daily.

From this time everything went on well, the only trouble being due to the discharge of motions and the difficulty in applying an apparatus to hold them. He left the hospital on August 20th.

On Nov. 26th he came up to report progress. His general health was very much improved. His bowels acted fairly well, some motions passing by rectum. Occasional attacks of abdominal pain. He had an instrument adapted to the opening in groin, which collected the liquid fæces which passed, and which previously was his great trouble. There was some prolapse of the mucous membrane of the intestine through the artificial opening, the membrane being very congested, and bleeding easily.

Dec. 10th.—Renewed prolapse of intestine through the artificial opening; easily reduced by manipulation. The opening is now, from dilatation, about half an inch in diameter.

April 29th.—A year to-day has passed since the operation, and I have seen this patient frequently during the interval. He may be described to be in good health. He has in external appearance no signs of internal disease, and a careful examination of the abdomen fails to discover any. The artificial anus, however, is a source of great inconvenience on account of the difficulty there is in fixing a convenient apparatus to catch the feculent discharge as it flows. If this difficulty could be overcome, and I hope to do so, the operation would be a great success. With respect to the nature of the case there is much obscurity. The original opinion, that it was one of cancer, can hardly now be entertained, as the general health has so much improved since the operation, and beyond the fact of the intestinal obstruction there is no local evidence of such a disease. I am disposed to think that the attacks of obstruction to which he has been subjected, and which eventually called for operative interference, will be found to be due to some peritoneal change by which the intestines have been bound together, and the passage through them, and more particularly through the small intestines, has been interfered with. Under these circumstances the prognosis is good, and I can see no reason why the man should not live the full period of life.

CASE 2. *Chronic intestinal obstruction; enterotomy; recovery.* (Reported by Mr. F. Bayes).—Robert R——, aged fifty, was admitted into a private room at Guy's Hospital on July 7th, 1877, under the care of Mr. Bryant. He had been a healthy man up to two months before, when he began to suffer from abdominal pain, which had steadily increased in severity. The pain was associated with constipation.

On July 2nd, five days before his admission, the attack of pain suddenly appeared, accompanied with retching and vomiting; the abdomen also became more distended. He therefore sent for Dr. Cortis, of Kennington, who, finding that constipation was present, prescribed a purge and a castor oil enema. No relief, however, followed these measures, although they were repeated. A spirit-of-turpentine enema was then given, but without any beneficial result. Mr. Bryant was then asked to see him in consultation, and as it seemed clear that nothing less than an operation could be of any avail, he was sent to Guy's.

On admission on the fifth day of the attack the symptoms were those of acute obstruction grafted upon chronic. The abdomen was much distended, and coils of intestine were visible with peristalsis. Constipation was complete, and no wind had passed for five days. Vomiting was incessant, and of a fæcal nature. Pulse very feeble.

An examination per rectum revealed nothing, and it was not thought right to introduce the hand for exploratory purposes, as the history of the case rather suggested obstruction near the cæcum, and in the right iliac fossa a tense distended coil of bowel was to be felt and seen.

The operation of enterotomy was consequently performed precisely in the way described in the last case. In the operation, on opening the peritoneum, some ascitic fluid escaped stained with blood. A silver suture was also used, instead of silk, to secure the orifice of the opening into the bowel to the skin. The wound made into the bowel was not a quarter of an inch long. As soon as the intestine was

opened, a stream of dark fluid fæcal matter, accompanied with wind, was forcibly ejected. A morphia suppository was given, and ordered to be repeated every four hours. Four hours after the operation the patient was comfortable, having lost all his pain. He had not been sick. Temperature, 98·4°; pulse 82. His urine was drawn off at regular intervals.

July 8th.—Has passed a quiet night, free from pain and sickness. He had taken a pint of milk during the night. A quantity of motion has passed through the artificial anus without distress. The abdomen has much diminished in size. Temperature 98·2°; pulse 88.

9th.—Going on well. Temperature 98·2°; pulse 88. No sickness or pain. Enjoys his milk. Urine natural. Suppository to be given twice a day.

11th.—Doing well in every respect. Temperature 98°; pulse 80.

13th.—Wound slightly red round edges from the irritation caused by the fæces. Nothing wrong in other ways.

17th.—Stitches removed, good union having taken place. Water still has to be drawn off.

18th.—2.30 P.M.: A soap enema.—9.30: Temperature 98·4; pulse 100. Enema acted very freely, nothing but motion coming away. He felt very much relieved afterwards.

19th.—The patient was much easier, and was able to pass his urine. His bowels had not acted again. He was in some pain, and a morphia suppository was given him.

20th.—The pain over the lower part of his abdomen still continued, but he thought the suppository relieved it. He had rheumatic pains in his arms and shoulders, which kept him awake at night.—4.30 P.M.: Paroxysmal pains; no fæcal discharge from the wound from 6 P.M. of the 19th to 3 P.M. of present date. A catheter was passed into the bowel with marked relief.

21st.—He was unable to sleep on account of the paroxysmal pain in the lower part of his abdomen. The painful part felt tighter. An enema of oil and gruel had failed to act, so a soap enema was ordered, which relieved him. Some hard masses of what appeared like condensed fat, with some shreddy tissue, came away with the motion. These under the microscope only showed granules of fat, of no regular texture. They appeared almost like tallow, and quite dissolved in ether. Were they the fat of which the suppositories were made up?

25th.—11.45: He had a great deal of pain in the lower part of his abdomen, coming on much more violently now and then. The wound was discharging freely. He slept well, and passed his urine freely and easily. Sickness came on about mid-day, and was accompanied by severe pain.—12.45 P.M.: An enema was ordered, but it gave only slight relief, the sickness continuing. Another enema was given during the evening with but slight relief, some white mucoid discharge coming away. There was no sickness since 9 P.M., and he had kept the second dose of medicine down. Temperature 97·2°; pulse 130. Pain was still very paroxysmal.

26th.—He had not vomited since 3 A.M., but he still had pain, especially across the umbilicus, which was tender on pressure. The vomit had no fæcal odour.

27th.—He had hardly any pain, only occasional and slight. Had a nutrient enema between 7 and 8 o'clock. Wound discharging freely.

28th.—The suppositories were continued; no sickness. Some more enemata given. The wound freely discharged.

30th.—The patient had a bad paroxysmal attack of pain in the morning, lasting from about 1 to 3 o'clock, but had since been quite comfortable. He was ordered a morphia suppository every twelve hours.

Aug. 4th.—To have a soap enema immediately. No pain.

6th.—Ordered chicken.

9th.—Has had no pain since the 30th.

14th.—Is doing well. The wound is completely healed, and fæces flow without pain. Temperature 97·4°; pulse 84.

21st.—Is convalescent, and talks of going home. Artificial anus established. He has passed no motion nor flatus per rectum since his illness. Abdomen flaccid. No signs of tumour to be felt.

23rd.—Returned home.

The difficulty in this case, as in the former, was to fit an apparatus to keep the bowel in its place and catch the motion as it passed. It is to be noticed that in neither this nor the other case was there the slightest constitutional disturbance after the operation as indicated by any rise of temperature, nor sign of peritonitis.

January, 1878.—This patient was not well looked after on his return home four months ago, and as a result a bed-sore appeared, from which he died. A partial post-mortem examination was made by Dr. Cortis, when it was found that an annular stricture of the ascending colon existed about three inches from the ileo-cæcal valve, and through which nothing could be passed; that the artificial anus, which was well established, opened into the ileum three inches from the cæcum; and that no other disease existed.

I subsequently learnt from Dr. Cortis that about three years before Mr. R——'s illness he fell over a case of goods, and hurt himself in the right side of his abdomen. The accident was followed by sickness, and by more or less pain, with nausea and occasional vomiting. "It is possible," adds Dr. Cortis, "that the injury induced the chronic inflammation, with gradual thickening and contraction of the bowel, which led to its occlusion, and death," and in that opinion I quite agree.

(To be concluded.)

EYE CASES ILLUSTRATIVE OF MEDICAL OPHTHALMOLOGY.

BY R. ATKINSON, B.A. CANTAB.

THE following cases have been compiled in the hope that they may be not without interest as illustrating some of the points of Dr. Hughlings-Jackson's address on Medical Ophthalmology, delivered before the Medical Society of London, and of which a summary appeared in the pages of THE LANCET. Most of the patients whose histories are here related have been recently, or are now, under the care of Dr. Hughlings-Jackson, in the wards of the London Hospital; one only was under another physician, Dr. Langdon Down, whom I have to thank for his great kindness in allowing me to make use of the case for the purposes of this paper. I allude to the fatal case of lead-poisoning.

Paralysis of Ocular Movements from Disease of Nerve-Centres.

CASE 1.—E. W——, aged sixty-five, was admitted on October 25th, 1876. At first sight she seemed to have ordinary left hemiplegia; but a more careful examination showed that this opinion required considerable modification. Her left arm lay apparently helpless by her side, but, when told to do so, she lifted it slowly and gradually from the bed. When the limb was at rest the hand was generally closed; at my request, however, she opened it, and abducted and adducted the fingers. She was able also to grasp almost, if not quite, as forcibly with the right as with the left hand. There was very slight facial paralysis, the tongue being protruded in the middle line, and the mouth but slightly drawn to the right when the patient grimaced. Speech, voice, and articulation were unaffected. The motor paralysis of the leg was as slight as that of the arm and face. The head and eyes were markedly turned to the right, or away from the paralysed side, but still she was able to direct her eyes so as to look to her front, though she could not keep them fixed in that direction sufficiently long to allow me to test her for hemiopia. Sensibility of the left half of the body was deeply affected; severe pinching of the left arm or leg did not cause her to wince, while a much slighter pinch caused the right arm to be at once withdrawn, with an exclamation of pain and annoyance. Smell and taste were tested, without any trustworthy conclusion being arrived at. The right arm was the seat of chorea-like movements, which the patient was unable to subdue, though at Dr. Hughlings-Jackson's request she tried to keep the limb at rest. When her hand was held, during an attempt to count her pulse, the elbow was jerked about just as is that of a patient suffering from chorea; and similarly, when the forearm and wrist were kept forcibly still, the fingers were moved about. She fell gradually into a state of hebetude, which soon deepened into coma, and was followed by death on Nov. 3rd.

At the autopsy there was found a hæmorrhage into the right optic thalamus, the posterior two-thirds of which were thereby destroyed. This clot was about the size of a walnut, and extended forwards to the posterior margin of the soft commissure, inwards to within an eighth of an inch of the

surface, whilst above it broke through the free surface of the ventricle; outwards, it extended to a point on a level with the caudate nucleus, and backwards to about an eighth of an inch of the free surface; downwards, the limits were the surface of the crus and the geniculate bodies, and it also extended to within a line of the optic tract. The kidneys were granular, and all the changes were found which most commonly accompany that condition. The muscles of the left arm and leg appeared wasted, and more flabby than those of the right side. Rigor mortis was absent in the former, while it still persisted in the latter.

CASE 2.—On May 5th a little girl aged seven was brought to the hospital comatose, and while in the receiving-room had a convulsive seizure, in which her head, eyes, and mouth were strongly drawn to the right side. Her right arm was raised, semiflexed at the elbow, and with the hand clenched. The right leg was not affected by the spasm, which passed off in about fifteen minutes, without being observed to become general, though the child was carefully watched. About two hours after her admission she was conscious, and when she spoke it was observed that she was aphasic. There was, moreover, slight weakness of the right arm and of the same side of the face,—of which paralysis, however, as of the aphasia, no trace could be detected on the following day. Her optic discs and her heart were carefully examined, but there was no evidence of neuritis or of heart disease. Her urine contained neither albumen nor casts.

These two cases seem to illustrate what was said by Dr. Hughlings-Jackson concerning lateral deviation of the head and eyes. In the first case we have, as was revealed by the autopsy, a destroying lesion, causing the head and eyes to be turned away from the paralysed side; and in the second a discharging lesion, causing, not paralysis, but spasm of the opposite side, while the head and eyes turned towards the side convulsed.

What was seen in the woman whose optic thalamus was destroyed by disease coincides remarkably with the observations of Dr. Ferrier on a monkey in whom the thalamus had been artificially destroyed. In the latter as in the former there was absolute loss of sensibility of the limbs of the side opposite to the lesion. Dr. Ferrier's monkey did not move his apparently paralysed arm and leg until he was placed on his back, when he struggled violently with all four limbs; just in the same manner our human patient was never seen to move her paralysed arm or leg until she was asked to do so; then, indeed, she moved them, all the movements being well represented.

The coexistence of spasm of the arm, aphasia, and lateral deviation of the head and eyes, without spasm of the leg, as was seen in Case 2, was probably due to a discharge of cortical grey matter in the neighbourhood of the frontal convolutions. That this is so has been shown clinically by Dr. Hughlings-Jackson, and experimentally by Dr. Ferrier. The centres for speech, for lateral movements of the eyes, and for movements of the arm, have thus been demonstrated to be clustered together in the region named. The presence of aphasia after the cessation of the spasm is a negative symptom, and similar to the transient paralysis observed in the arm. Dr. Hughlings-Jackson believes the first as well as the second to be due to temporary exhaustion of nervous centres from excessive discharge.

Paralysis of Ocular Muscles.

Speaking of paralysis of ocular muscles, Dr. Hughlings-Jackson said: "Vertigo, caused by paralysis of ocular muscles, is not due to diplopia, but to erroneous estimate of the position of objects by the one eye which is lamed." There was recently in the hospital a man on whom this could be readily demonstrated. He had paralysis of his right external rectus, which was supposed to be due to syphilitic disease of the trunk of the sixth nerve. There was a definite history of the primary and secondary disease seven years ago; and besides that, he had, previously to admission, had paralysis of his third, followed by paralysis of his fifth nerve. Dr. Hughlings-Jackson thinks that such a random succession of paralyses is almost by itself sufficient to justify the diagnosis of syphilis made in this case. This man had double vision, and an unsteady gait; but the latter was not the result of the former, for when his sound eye was covered, he could no longer have double vision, nevertheless he was still as giddy as before. When he attempted to strike the hand of the observer held a little to his right, his hand went invariably outside the object aimed at. The external rectus being paralysed, the centre for parallel movements to the right made a strong discharge in order to overcome the obstacle, and the mind, judging of the position of the object not by the movement effected, but by the current sent out, was misinformed, and thus arose the error. At the same time, the left internal rectus—the muscle associated with the right external rectus in movements outwards—receiving an excessive stimulus, acted too strongly, and thus was produced a convergent strabismus. On the other hand, with the paralysed eye protected, the patient could walk steadily, and without hesitation.

Albuminuric Retinitis.

There is now in the hospital, under the care of Dr. S. Mackenzie, a man aged twenty-five years, who, having presented all the symptoms of acute nephritis, is now supposed to have large white kidneys. In August last this patient was during three whole days in a state of coma, his condition then being that usually known as uræmic coma. At the same time he had well-marked neuro-retinitis, his discs being swollen and of a dull leaden hue, the arteries obscured, the laminæ cribrosæ hidden, and the veins dark and tortuous. There were numerous hæmorrhages and glistening white patches, most numerous in the region of the yellow spot. The patient recovered from his coma; the hæmorrhages were absorbed, and the glistening white patches are now much smaller in size and fewer in number than they were three months ago. Dr. Hughlings-Jackson, in his address, remarked that he had seen these appearances clear off altogether, and it seems highly probable that such will occur in this case.

(To be concluded.)

A HELP TO FLAP-MAKING IN AMPUTATION.

BY JOHN GAY, F.R.C.S.,
SURGEON TO THE GREAT NORTHERN HOSPITAL, ETC.

IN the course of an amputation the construction of the flaps—their size, form, and composition—constitutes perhaps that part of the detail which mostly taxes the resources of the surgeon, and which in the end affords him the least ground of self-congratulation. It is often alleged that they are good, but seldom that they might not have been better. It is, under any circumstances, not easy, whilst watching the course of the knife in shaping a flap, especially in a skin amputation (now so often adopted), to keep clearly in mind the point at which the cut should terminate on one side without constantly recurring glances at that from which it sets out on the other, and still harder at the same time to shape the flap in strict conformity with the exigencies of the case.

The shape might certainly be marked out on the skin by some pigment, but a surgeon seldom likes to betray that want of confidence in his own mental resources which such a guide would suggest, and would prefer an expedient, if he adopted one at all, that would not carry with it its own exposition.

The complete success of such an operation is, of course, the first aim of the surgeon; and, if this can be promoted by a simple device which is not open to the objection just referred to, I venture to think there are few whose sense of "self-help" would be offended by its adoption. The following is the plan I have now pursued for some time past, and with such comfort and satisfaction that I venture to commend it to at least the less practised of my surgical brethren.

I provide myself with an ordinary india-rubber ring, such as is used for encircling small packages, selecting one that will easily, but firmly, embrace the limb to be amputated. The ring is to be tied tightly at two points (*a*, *a*, in the figure) by a piece of coarse ligature silk, and the knots cut short. These points should be equidistant, if the flaps are to be of the same width at their bases; and varied, in point

of distance from each other, according to any modification with respect to this measurement that the surgeon may deem desirable. The ring so provided is now to be placed around the limb over the spot at which the severance of the bone or bones is to be made (*b*, *b*), and the knots over the points on each side at which it is intended that the flaps should unite at their base (*a*, *a*).

It will be obvious that this simple contrivance will not only afford the means of securing the exact apportionment of the skin as far as the width of the flaps and their points of starting are concerned, but will also form a guide by which their depth (*c*, *c'*) and outline can as readily be determined.

LARYNGISMUS STRIDULUS,

WITH SPECIAL REFERENCE TO THE VALUE OF CHLORAL HYDRATE IN ITS TREATMENT.

BY WILLIAM STEWART, M.R.C.P. ED., &c.,
HON. SURGEON, BECKETT HOSPITAL AND DISPENSARY, BARNSLEY.

LARYNGISMUS STRIDULUS has been known to and described by physicians ever since, if not previous to, the beginning of the last century. Various designations have been applied to it by different observers, according to the view they took of the cause of the disease or the nature of its most prominent symptom. It was the "asthma thymicum" of Kopp, a German author, who gave it this title because he found the thymus gland enlarged in some of his cases of the affection. It was described by Dr. John Clarke as "a peculiar species of convulsions in children." It was the "cerebral croup" of Colley, the "child-crowing" of Gooch, the "spasmodic breathing" of Burns, "spasm of the glottis" of West and other authors, and the "laryngismus stridulus" of Mason Good and Hugh Ley.

The cause of the disease has been attributed by some writers to the pressure of enlarged glands, such as the cervical, the bronchial, or the thymus, upon nervous trunks or branches connected directly or in a reflex manner with the nervous supply of the muscles of the larynx; by others to cerebral congestion or pressure producing centric irritation of the roots of the laryngeal nervous supply. But these theories of its production have been to a considerable extent abandoned for that first propounded by Dr. Marshall Hall in his notes to Underwood's "Diseases of Children" (ninth edition, p. 147). He there suggests that the affection is produced "through the fifth pair of nerves in teething, the eighth in indigestion, and the spinal nerves in constipation, as parts of a system of nerves endued with a peculiar function which I have denominated the reflex."

To whatever cause the various observers attributed the origin of the affection, nearly all are agreed upon the prominent fact that the disease is never seen at any other period of life than that of the first dentition. This accords with my own experience of the affection. All the cases that have occurred in my practice have been in children who were either developing or cutting teeth, and usually in those children in whom the process of dentition seemed to be for a time arrested. And as the peripheral irritation consequent upon this process will explain, in as complete a manner, the production of the spasm through the medium of the reflex action above alluded to, without the addition or help of glandular enlargement, gastric irritation, or intestinal derangement, I think we may reasonably discard these conditions, when they do exist, as mere coincidences, or, at most, as separate expressions of the same constitutional dyscrasia which is usually associated with the affection.

In a very lucid description of this affection given by Sir Wm. Jenner, in a clinical lecture published in THE LANCET (1875, vol. i., p. 2), rickets is mentioned as the constitutional state which is almost invariably present in laryngismus stridulus. I have found also, in common with Hirsch, Kopp, Caspari, and other authors, that the majority of my cases have had the strumous diathesis, and are usually associated with a deficient amount of bone-producing pabulum in the blood; this condition being greatly the result of inherited constitution, and probably also in some measure due to defective nutrition from improper nourishment. Several of my cases did not appear to belong to this class, but were the children of healthy parents; but in these the patients seemed to be more than usually of a nervous and excitable temperament, easily moved to tears or laughter. And I may here observe that the prominent symptom of the disease appears to me to be like an exaggeration of the normal "kink" or crow that precedes and accompanies the phenomenon of crying or laughing in a young infant of this age. This view of the nature of the spasm would account for the manner in which sudden mental impressions so readily provoke an attack. It is well known that sudden emotions, such as fear or joy, or sudden waking from sleep, are all-sufficient to determine its onset. These exciting causes seem to me to act by producing a sudden and forced effort at inspiration before crying or laughing occurs.

The treatment prescribed by the older practitioners varied from leeches, cupping, and counter-irritation to the head, and calomel and jalap internally, in what they termed the plethoric cases, to a long-continued course of milder purgatives, such as castor oil and senna, in the anæmic cases. This practice was long ago deservedly discontinued; though, strange to relate, some of them give instances of cure after the patients had passed through this ordeal. Iron and other tonics were recommended by West. Lancing the gums and change of air were advised by nearly all; and in the clinical lecture before alluded to Sir William Jenner recommends iron and cod-liver oil for the general condition, and the bromides in large doses to lessen nerve sensitiveness.

No allusion, so far as I know, has hitherto been made to the beneficial effect of chloral hydrate in laryngismus stridulus. During the last eight or nine years I have been in the constant habit of prescribing and relying upon chloral hydrate as my "sheet-anchor" for the cure of this affection. From the composition of chloral hydrate being so closely allied to chloroform, it might be reasonably inferred that it would prove highly efficacious in the relief of spasm, especially of spasm of the muscles of the laryngeal apparatus. My belief in its efficacy was first confirmed in a case of acute laryngitis in a young female patient attended by me, where the most distressing symptom was a spasmodic barking cough, occurring at intervals of about thirty seconds. Since that time I have used it with decided benefit in all cases in which spasm of the laryngeal muscles seemed to be a prominent symptom, such as in whooping-cough and the catarrhal laryngitis of young children.

But it is in cases of laryngismus stridulus that I have found it to be the remedy *par excellence*. Soon after commencing its use the laryngeal spasm begins to recur less frequently, and the attacks become slighter and of shorter duration, until at the end of two or three weeks the disease finally disappears altogether.

With regard to the dose. For children six months old, two grains of the drug may be administered three times a day, increased to two grains and a half at twelve months, and to three grains at two years. In these doses I have never observed any unpleasant symptom or disagreeable effects from its use.

With regard to its mode of action, it appears to me to be beneficial by blunting the highly nervous excitability which exists in children of this age, and by thus calming for a time the irritability of the nerve involved in producing the spasm a cure is at length effected. To meet the treatment of the constitutional cachexia, I have administered powders of the phosphate of lime night and morning, or a few drops of the syrup of the hypophosphite of lime in order to assist the development of the teeth, and to promote the growth of bone generally, and at the same time I have prescribed dietetic, hygienic, and other remedial agents to remove as far as possible permanently the constitutional causes without which the disease would probably never have had an existence.

Highfield House, Barnsley.

DR. JAMES ADAMS has been presented with a handsome drawing-room clock with side ornaments, a congratulatory address, and a book containing the names of the subscribers, on the occasion of his marriage. The clock is inscribed thus:—"Presented to James Adams, M.D., on the occasion of his marriage, by the supporters and patients of the Ashburton and Buckfastleigh Cottage Hospital, in recognition of his valuable services to that institution."

THE DIRECT METHOD OF ARTIFICIAL RESPIRATION FOR THE TREATMENT OF APNŒA FROM DROWNING, ANÆSTHETICS, STILL-BIRTH, ETC.;

WITH A TYPICAL CASE OF EACH, TREATED BY THE AUTHOR, IN WHICH OTHER METHODS WERE NOT IMMEDIATELY PRACTICABLE.

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As a supplement to a lecture delivered at King's College Hospital, and published in THE LANCET of Aug. 11th, 1877, it has been thought expedient, in compliance with many requests, to publish the Direct Method in the form of rules with illustrations. Acting on this suggestion, I now submit, in the following order—

1st. *Rules for the Direct Method of Artificial Respiration.*

2nd. *Some reasons for these rules.*

3rd. *Cases which suggested the idea of this method, other methods being impracticable.*

4th. *Cases illustrating the application of the rules of this method.*

5th. *Show the peculiar applicability of this method to cases of still-birth, citing first cases in which other methods were impracticable.*

6th. *Give an account of the origin of the formula of the Direct Method in the difficulty of making the principle and formulæ of other methods understood by laymen.*

7th. *Submit some observations upon the Directions for the Treatment of the Drowned published by the Royal Humane Society and the National Life-boat Institution.*

8th. *State some of the advantages of this method over other methods in the above directions for public use.*

As in asphyxia from drowning there are conditions *plus* those in apnœa from other causes, I will, for comprehensiveness, submit the method in question in the form of

RULES FOR ARTIFICIAL RESPIRATION IN THE TREATMENT OF THE DROWNED.

RULE I. (Fig. 1.)—*For Ejection and Drainage of Fluids, &c., from the Stomach and Lungs.*

Position of Patient.—Face downwards; a hard roll of clothing beneath the epigastrium, making that the highest point, the mouth the lowest. Forehead resting upon fore-arm or wrist, keeping mouth from the ground.

FIG. 1.

Position and action of Operator.—Place the left hand well spread upon base of thorax to left of spine, the right hand upon the spine a little below the left, and over lower part of stomach. Throw upon them with a forward motion all the weight and force the age and sex of patient will justify, ending this pressure of two or three seconds with a sharp push, which helps to jerk you back to the upright position. Repeat this two or three times, according to period of submersion and other indications.

RULE II. (Fig. 2.)—*To perform Artificial Respiration.*

Position of Patient.—Face upwards; the hard roll of clothing beneath thorax, with shoulders slightly declining over it. Head and neck bent back to the utmost. Hands on top of head. (One twist of handkerchief around the crossed wrists will keep them there.) Rip or strip clothing from waist and neck.

FIG. 2.

Position of Operator.—Kneel astride patient's hips; place your hands upon his chest, so that the ball of each thumb and little finger rests upon the inner margin of the free border of the costal cartilages, the tip of each thumb near or upon the xiphoid cartilage, the fingers fitting into the corresponding intercostal spaces. Fix your elbows firmly, making them one with your sides and hips; then—

Action of Operator.—Pressing upwards and inwards towards the diaphragm, use your knees as a pivot, and throw your weight slowly forwards two or three seconds until your face almost touches that of the patient, ending with a sharp push which helps to jerk you back to your erect kneeling position. Rest three seconds; then repeat this bellows-blowing movement as before, continuing it at the rate of seven to ten times a minute; taking the utmost care, on the occurrence of a natural gasp, gently to aid and deepen it into a longer breath, until respiration becomes natural. When practicable, have the tongue held firmly out of one corner of the mouth with thumb and finger armed with dry cotton rag (Fig. 2, *a*).

[*Note.*—Avoid impatient vertical pushes; the force must be upward and inward, increased gradually from zero to the maximum the age, sex, &c., may indicate. Abandon no case as hopeless within an hour's useless effort.]

For the Public.—In answer to requests from several medical gentlemen, I transcribe, with slight alteration, the following rules of the Life-Saving Society of New York:—

RULE I. (Fig. 1.) *To drain and force water from the lungs and stomach.*—INSTANTLY place patient face downwards, a hard roll of clothing being placed beneath pit of stomach to raise it as much as possible above the level of the mouth. Put one wrist of patient under his forehead to raise mouth off the ground. With hands well spread upon patient's back, above the roll of clothing, throw upon it your whole weight with a forward motion, and keep up the pressure about three seconds, so as to force all water from stomach and lungs out of the mouth, ending the pressure with a push which will help to jerk you back to your upright position. Repeat this once or twice, and then QUICKLY proceed with

RULE II. (Fig. 2.) *To make the patient breathe.*—Turn the patient face upwards, the same hard roll of clothing being now beneath his back, the shoulders slightly drooping over it. Bend head backward and downward, putting throat on the stretch to the utmost. Place hands of patient on top of head (one twist of handkerchief or string around the crossed wrists will keep them there). Rip or strip all clothing from waist and neck.

Now kneel astride patient's hips. Grasp front part of chest on both sides pit of stomach; your thumbs pointing to patient's chin; your fingers fitting into the grooves between the short ribs.

Fix your elbows firmly, making them one with your sides and hips; and then, firmly pressing the sides of the patient together and using your knees as a pivot, throw yourself

slowly forward for two or three seconds until your face almost touches the face of the patient, and your whole weight presses upon his chest. End this pressure with a short push which *suddenly* jerks you back again to the upright kneeling position.

Rest three seconds while the ribs spring back; then repeat this bellows-blowing movement as before, gradually increasing the rate from seven to ten times a minute; but take the utmost care, on the occurrence of a natural gasp, not to interrupt it; but, as the ribs fall, gently press them and deepen the gasp into a longer breath. Continue this until the natural breathing which you are imitating needs no further assistance. If all fails, keep on; because any moment within an hour's effort you may unexpectedly be rewarded with success.

[*Note.*—If a second person be present and can do it, the tongue should be held out of one corner of the mouth by the thumb and finger, armed with a piece of dry cotton or linen rag (Fig. 2, *a*). Of course, it is understood the force employed will be moderated in both rules according to the age and sex of the patient.]

SOME REASONS FOR THESE RULES.

Some reasons for Rule I.—The principal intention of this rule, is to accomplish without an assistant the removal of obstructing fluids &c. from the lungs and stomach, alternate inspirations intervening between each effort.

A hard roll of clothing is specified for the elevation of epigastrium as directed, partly because the material for it is sure to be at hand, partly because the clothing of the drowned man being wet is the better adapted to the purpose. The compression thus made by Rule I. is applied just where the obstructions exist, and it can be regulated as may be deemed expedient. The forward motion accompanying the pressure promotes propulsion. The line of descent from the stomach to the mouth causes ejection to be followed up by rapid and complete drainage. The slight elevation of the forehead and extension of the head promote gravitation of the tongue and freedom of exit from pharynx, mouth, and nares.

Slight prolongation of the pressure upon the back has been directed in order that ejected material may, before the removal of the pressure, get clear beyond the reach of the inspiratory suction accompanying the rebound consequent thereupon.[1] It is hardly necessary to remark that in view of the unavoidable inspiration following each effort for ejection, even though no fluids be found to have accumulated, no time has been wasted. Not unfrequently the fundamental and predominant condition in the asphyxia of people rescued from drowning is one of profound syncope, from the fright attending recent immersion; and for this condition the position directed in Rule I. is indisputably the supreme remedy also.

Some Reasons for Rule II.—By this rule it is intended—

1st. Without an Assistant, to obviate anatomical causes of respiratory obstruction.

2nd. To obtain the greatest possible thoracic expansion.

3rd. To produce the greatest practicable alternate thoracic compression, and thus exchange of air; and this with regularity and rhythm, and with least possible fatigue to the Operator.

The anatomical causes of respiratory obstruction in the ordinary supine position in asphyxia, beginning from below upwards, are—1st, flexion of the thorax upon the abdomen; 2nd, gravitation of the epiglottis; 3rd, gravitation of the tongue; 4th, gravitation of the velum palati; 5th, flexion of the head. The nature of these obstructions and an explanation of the anatomical remedy against them have been fully set forth by me in a paper, an abstract of which was read before the Royal Medical and Chirurgical Society on the 14th inst.,[2] and can here be but barely adverted to. For the flexion of the thorax upon the abdomen, the consequent pressure from above downwards, and from below upwards, with the embarrassment of the diaphragm between, is substituted extension, and all the opposite conditions incident to the change.

The utmost extension backwards of the head and neck, as directed in Rule II., provided the mouth be not too much open, produces simultaneously—

1st. Elevation of the epiglottis, vertical or otherwise, at will.

2nd. Prevents the tongue falling against the back of the pharynx by the same law which in the ordinary position compelled it to fall there.

3rd. Interposes a tense velum palati between the tongue and the pharynx, establishing a post-oral air-way from the glottis to the nares secure against all intrusion, with such other advantages from extension of the head as naturally antagonise the obstructions arising from flexion.[3] Whatever danger there may be in the alleged cerebral anæmia which has been assumed to exist in chloroform poisoning, so much insisted upon by Nélaton and Sims, this head-down position also long ago anticipated this, and antagonises it.

The thoracic expansion sought by Rule II. is obtained—

1st. By straightening the dorsal curvature of the spinal column. The weight of the trunk resting at this point with its greatest thoracic curvature upon the hard roll of clothing, the curve is diminished, the spinal column is proportionately straightened and lengthened, many of the ribs are moved upward, the interspace between them is increased, the sternum is carried forward, and the general thoracic circumference is thus enlarged.

2nd. By extension of the head and neck. This brings into play the scaleni, sterno-cleido-mastoidei, and all the muscles from the head and neck attached to the upper part of the thorax.

3rd. By extension of the arms. This being directly upwards and backwards, instead of upward and forward, as in Silvester's position, not only are the same muscles his position uses made more tense, but other muscles, the latissimus dorsi, are also brought into play, and thus the superior costæ, the inferior costæ, and as nearly as possible all the parts of the entire thorax, are submitted to the traction of the muscles presiding respectively over the expansion of those parts.

The force employed for thoracic compression is elastic, well distributed, well directed, and can be easily regulated, from the weight of the hand to the maximum weight and strength of the operator. In both the other methods, the hips and raised shoulders are piers upon which the arched trunk rests; the highest point of the arch is the most elastic part of the chest, and beneath the point of pressure is a hollow space; thus there is pressure without resistance, and this yields not the compression sought. In Silvester's the part where the pressure is to be made is the farthest reachable point from the operator, the direction of the pressure is more towards the abdomen than towards the diaphragm, and the remnant of force brought to bear upon the ribs is minimised by the intervention of the elbows of the patient between the hands of the operator and the part to be pressed.

In Rule II., the position of the hard roll of clothing furnishes exact counter-pressure; it makes most prominent the part to be compressed. This part is under the hands—the whole weight if he wishes—of the operator, he being all the time in an easy position. His sensitive hands and fingers distribute, direct, and regulate the force employed. This force is exerted on the ribs not directly, but through the medium of the skin over them, made tense by the fingers in the intercostal spaces. The direction of the motion produced in the ribs is natural, being first upon the spine at the costo-vertebral articulation, the spine being a fixed point; next, upon themselves in the direction of their long axes.

The fixation of the operator's elbows as directed enables him to substitute almost entirely his weight for the force of muscular exertion.

The final push ending the pressure corresponds to the twitch with which, after the bow has been bent to its utmost, the boy starts the arrow from his bowstring—it causes a sharper rebound.

The substitution of seven to ten respiratory movements for

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[1] A case showing the effectiveness of this Rule I., for ejection, has recently been reported by Mr. James, house-surgeon of Guy's Hospital, in which not only the stomach, but the rectum also, was thus promptly evacuated.

[2] An Anatomical Remedy against Respiratory Obstruction from the Tongue, Epiglottis, and Velum Palati, in Threatened Apnœa, &c.—Proceedings Med. Chirurg. Soc., May 14th, 1878. (*Vide* p. 737.)

[3] These three points have been demonstrated by me to eminent anatomists, surgeons, and physiologists at King's College Hospital, Guy's Hospital, and at the Royal College of Surgeons of England. And in view of the novelty, interest, and importance of these facts, together with demonstration of the practicable impossibility of elevating the epiglottis by any amount of traction upon the tongue, and of some other points yet to be presented, a written statement that such demonstration had been witnessed by them, was given me by Gerald F. Yeo, M.D., Professor of Physiology; E. H. Howlett, M.R.C.S., House-Surgeon, and others, of King's College; and by Mr. Thomas Bryant, Dr. C. Hilton Fagge, Dr. F. A. Mahomed, and Mr. C. J. Symonds, of Guy's Hospital.

the fifteen per minute hitherto universally adopted, may, especially to such as have never spent an hour at attempting resuscitation, need some justification. Apart from the fact that making the previously authorised movements 900 times an hour is a feat quite impracticable to an untrained person, this rate is on other accounts equally inexpedient. In a healthy person in the supine position a maximum of three or four respirations per minute incurs little inconvenience—certainly no discomfort,—and is therefore manifestly more than is necessary simply for the maintenance of life. A rate twice as fast as this is, I think, for an unconscious person, fast enough. Besides, the movements are then made more effectively, incur less incidental disturbance of the patient, and less fatigue to the operator. The interval of three seconds, as here directed, I deem expedient, because there is often a secondary wave of rebound; this is valuable, and should not be cut short. The interval is thus good for the patient; it also rests the operator.

The adaptation of the artificial movements to returning gasps, impracticable in other methods, is directed here, waiting upon nature being deemed better than ordering her, or of running the risk of crossing and interrupting her own feeble returning efforts. As during all of Rule II. the patient is close under the eye and touch of the operator, no symptom escapes his notice, and the aid required can with utmost delicacy be adapted to the occasion.

CASES WHICH SUGGESTED THE IDEA OF THIS METHOD, OTHER METHODS BEING NOT IMMEDIATELY PRACTICABLE.

When a house-surgeon in New York, I was called to a man asphyxiated from opium-poisoning, and rapidly approaching articulo mortis. The method of Marshall Hall, which was the only one then known, I instantly attempted to perform. The patient, however, was a large man, was lying deep in a feather bed, and this was on a sacking bottom. At each pronation the mouth unavoidably was buried in the bed. Moreover, the difficulty of the process was such I was soon too much exhausted to continue it. It occurred to me to get upon the bed, and, though too much exhausted then to make much manual pressure, to supplement it with my weight. Under this procedure the colour of the lips soon improved, and once I thought I detected slight pulsation at the wrist. This was but temporary, however, and on the advice of Dr. Mott, who some time after arrived, I relinquished further effort. The yielding of the spinal column, bed, and sacking bottom, suggested to me the importance, should a similar case occur, of using some means of counter-pressure.

Some years afterwards I was in consultation with Dr. A. Underhill, of New York, in the case of a lady, in which, during an examination, chloroform, carried simply to the point, as we thought, of anæsthesia, was used. Subsequently, after a rather prolonged consultation in another part of the room, we found, to our amazement, on returning, our patient apparently quite lifeless. This patient was larger and fatter than the other, and so much sunk in a large feather-bed that the Marshall Hall method was quite impossible. The bedstead had the old-fashioned high head-board and foot-board, and was a fixture in the corner of the room, and thus there was no space for the movements of the Silvester method. My experience of several years before occurring to me, I at once stuffed the bolster and some clothing beneath her back, and proceeded with what is now called the Direct Method. The effect upon the thorax was pleasingly apparent, and after a few minutes the patient gave a gasp. This I aided and deepened, and, continuing this a short time, the breathing became quite natural. A moment's delay in attempting to remove this patient we felt would be criminal. We had but one thought —Respiration, and that instantly. Dr. Underhill always insisted, and I am inclined to agree with him, that but for the instant applicability and use of the Direct Method on the spot, just where the patient lay, her restoration must have been impossible.

CASES ILLUSTRATING THE APPLICATION OF THE RULES OF THE DIRECT METHOD.

Case of Drowning in which the instructions of the Royal Humane Society and of the National Lifeboat Institution would have been insufficient.—A passenger, by a lurch, fell overboard into the ocean, the steamer making about thirteen knots, and was accordingly in the water not less than twenty minutes. The chances of resuscitation seemed so small, I was impatient and commenced at once with Rule II. The thorax, however, did not seem to respond. I applied Rule I. At once a very large amount of water and of dinner, just before taken, was ejected. Rule II. being re-applied, the thorax now responded freely, and in about ten minutes the patient gave the first sign of returning life. After about ten minutes more of respiratory training, the respiration became natural. There was no relapse. But for Rule I., for the object of which the published instructions of the above Societies furnish no directions, Rule II. would, I believe, have proved useless, and the recovery effected would have been impossible.

Case of Chloroform Poisoning, in which the Ready Method was on the spot impracticable.—At my clinique in the operating theatre of the University of Vermont, I was operating on a young woman, assisted by Professors Ordronaux and F. A. King, Dr. Peck, assistant to the chair of Surgery, and others. The chloroform to the point of anæsthesia I had given myself. Intent afterwards upon the operation only, my suspicion was first excited by the almost bloodlessness of the operation. Asphyxia was complete, and Professor Ordronaux could detect no movement of the heart. The case was very alarming, and several gentlemen, for different reasons, simultaneously left the theatre. The operating table was such a narrow one that the performance of the Marshall Hall method upon it was impossible. Instantly, therefore, I stuffed the pillow and some clothing firmly beneath the back, and proceeded according to Rule II., but standing beside the patient upon a chair, the narrowness of the table making kneeling astride the patient impossible. The patient in a few minutes gave a gasp, the respiration soon became quite natural, and the operation was completed.

APPLICATION OF THE DIRECT METHOD TO CASES OF STILL-BIRTH.

As seen in the accompanying engraving (Fig. 3), the child lies along the left hand of the operator, the ball of whose thumb takes the place of the hard roll of clothing seen in

FIG. 3.

Fig. 2. Over this the shoulders decline, the head falling back with arms, if convenient, on either side of the face. The buttocks and thighs are supported by the operator's fingers. Thus, the operator has the prominent little thorax completely within the grasp of his right hand, with firm counter-pressure behind, enabling him to apply, locate, distribute, direct, and alternate his pressure as he pleases.

Case which first suggested this application of the Direct Method, other methods being, under the circumstances, inapplicable.—I was called to apply the forceps in a primiparous labour, which had already lasted nearly three days. It was a seven months' child, and, as I had apprehended, it presented when delivered no present sign whatever of life, and from its colour no future prospect of it. Cold air, spanking, hot and cold water, &c., naturally proved useless. Division of the cord, I was sure, would be final to any lingering possibility of hope. Tethered between the thighs of the mother, the methods of Marshall Hall and of Silvester were alike impracticable. Holding the child in my left hand, I proceeded, however, with the Direct Method, as described above, stopping now and then, and making, quite unaided, mouth-to-mouth insufflation. In about twenty minutes the child commenced to breathe, and she is now one of the most vigorous girls I know. During this entire procedure, with

the exception of the head and shoulders, there was no exposure either of the mother or child.

Case showing the ease with which in still-birth certain adjunctive measures can be simultaneously employed with the Direct Method, which with other methods are impracticable.—This case, the next which came to me of its kind, was one of obstructed labour to which I had been called at the request of Dr. A. B. Ball and Dr. N. B. Emerson, of New York, to apply the forceps. For an hour and twenty minutes the head of the child had been submitted to all the force I could command, and naturally enough on delivery the child appeared, as was expected, hopelessly dead. I proceeded to apply the Direct Method under flannel, holding the child in my hand on my knee, Dr. Emerson making alternate mouth-to-mouth insufflation. This was so well done, the little thorax each time expanded so much in my hand, that to my feeling the process resembled as nearly as possible the use of the ordinary rubber spray or syringing apparatus. The nurse meanwhile applied friction under the flannel. A warm bath being now ready, the child was transferred to that, and the entire process, minus only the friction, was unremittingly continued in it, the water being maintained at proper temperature, without disturbing the process. How it was I don't know, but for about an hour and a half the bright or livid colour of the lips was entirely at our bidding; beyond this, however, no sign of life appeared. I cannot doubt, from the facts, that but for the great and prolonged cerebral compression, respiration in this case also would have been established.

To quote from various ordinary cases of success would serve no additional purpose. I have as briefly as possible given these, because they both illustrate what I want to show of the process, and at the same time explain the origin of the method and its applications. These last cases show that, in asphyxia neonatorum, this method can be applied at the instant of birth, and, if wished, before sacrificing the maternal connexion. For mouth-to-mouth insufflation—which in still-birth I deem of first importance—the position of this method is, I think, the best and the most convenient which in any case could be devised. I think the examples here given show that, in any case whatsoever, not only can the Direct Method be instantly applied on the spot, but that adjunctive measures of every sort—whether bath, friction, electricity, insufflation, and, distinctively, even tracheotomy—can be used simultaneously without interruption; all of which with any other method would be impracticable.

THE ORIGIN OF THE FORMULATION OF THIS METHOD, IN THE DIFFICULTY OF MAKING THE PRINCIPLES AND FORMULÆ OF OTHER METHODS UNDERSTOOD BY LAYMEN.

Notwithstanding more or less of the experiences just narrated, in my lectures in the University of New York, as also at the Long Island College Hospital, I allowed myself to teach only the authorised methods of Marshall Hall and of Silvester. An event, however, occurred which unexpectedly compelled me to consider the entire question from a new standpoint. From a report I had prepared, it appeared that, of the (I think) 244 deaths from drowning during the previous year within the metropolitan district of New York, not one appeared to have been reached by a medical man in time for an attempt at resuscitation.

Under the auspices of the New York Board of Health, I endeavoured to solve the problem whether it was not possible for the harbour police, who more generally rescue these unfortunates, to be made competent also to do something for their resuscitation. Ordered to head-quarters in squads for the purpose, I took for my guide the published Instructions of the Royal Humane Society and of the National Lifeboat Institution of England, and endeavoured to teach them to these men accordingly. To make these methods understood I certainly tried most earnestly and faithfully, but as certainly did I most signally fail. These men had but little notion of gravitation, less of respiratory muscles, and the relation between the motions taught them in either of these methods and the motions they could see in simple natural breathing they somehow always failed to comprehend. They learned, therefore, accurately, little or nothing of either method, and in the excitement of a subsequent emergency their notions and motions were more confused than ever. My only inclination was to abandon the whole matter. The responsibility, however, was a serious one, and I accordingly undertook to see how far the methods in question could be stripped of superfluous motions; how the essential feature of alternate thoracic compression and expansion, common to both and all methods, could be presented in the nakedest simplest form. The result was that, instead of throwing the men a nut to break their teeth upon, I was afterwards able to give them simply the kernel; this kernel was the Direct Method. This name I gave it at once, because, in contradistinction to the indirect ways of the other methods, by these rules the two or three things to be done are simply done—done as they would be in any other matter of daily life. The tongue is to be brought forward; it is pulled forward. The chest is to be pressed,—it is pressed;—and that without waste of time, strength, or motion. The result of the change was to all concerned very gratifying. The first day I ventured to teach the Direct Method, Rule I., was made to explain itself in a way I did not intend, the volunteer subject having but just had his dinner.

In explaining Rule II., having put a comrade patient in position, with black ink I described by continuous outline the lips, trachea, apex and conical contour of the bony walls of the air-chest, and with red ink marked the line of the diaphragm at its base. Beside this amateur patient I placed an old-fashioned pair of kitchen bellows kept widely open by a spiral spring at its base. I need hardly say the nozzle, windpipe, hard conical sides, pliant leather base, presented sufficient similarity to the ink outlines I had made on the patient to be quite amusing. But in illustrating simultaneously the action of the operator, both upon the one and upon the other, side by side, the manifest compression, rebound, and audible gasp, presented an analogy so complete, all I had to say about the steady increase of pressure ending with a short push, about the rhythm, the persistence, the gentleness to be employed, as in reviving a dying ember, was entirely anticipated, and each man I found on the first lesson to be as competent as he was impatient to "blow the belluss," as he called it, of his comrade. The lectures were henceforth anticipated by the men as much for the entertainment as for the instruction. It so happened the next morning one of this first squad fished out an unfortunate man who had sought relief by drowning near Catherine Ferry; and though for twenty minutes after rescue he gave no sign of life, this policeman succeeded in establishing respiration, and within two hours the man was able to return to his lodgings.

OBSERVATIONS UPON THE DIRECTIONS FOR THE TREATMENT OF THE DROWNED, PUBLISHED BY THE ROYAL HUMANE SOCIETY AND THE NATIONAL LIFEBOAT INSTITUTION.

Although I have for several reasons a strong disinclination for the criticism of other methods, I can scarcely conclude this paper without, in the interest of the societies whose aim I have so much and so long shared, making one or two observations growing out of considerable experience with the Directions published by the Royal Humane Society and the National Lifeboat Institution.

In the report of the Medical and Chirurgical Society's Committee of 1862, Experiment 19 is cited to show "the enormous force" with which foreign substances may be drawn into the air-passages, and Experiment 39 to show that in death from drowning, as contrasted with that from simple apnœa, "the lung-substance appeared to be saturated and sodden with water." My own experience not only corroborates this as true in cases of prolonged submersion, but that in submersion for shorter periods sufficient water frequently gets into the stomach to embarrass seriously the action of the diaphragm. In neither of the published instructions referred to, however, are any directions given for the preliminary disposal in any case of this accumulation; notwithstanding, it is a frequent cause not only of serious respiratory obstruction, but which may be, as I have shown in a case of my own above related, sufficient to cause defeat of attempts at artificial respiration which might otherwise have proved successful.

Prominently in the first part of the instructions of both these societies is the following (the quotation is *verbatim* from the Directions of the National Lifeboat Institution, those of the Royal Humane Society being substantially the same):—"Draw forward the patient's tongue, and keep it projecting beyond the lips; an elastic band over the tongue and under the chin will answer the purpose, or a piece of string or tape may be tied around them; or by raising the lower jaw the teeth may be made to retain the tongue in that position." Although fully appreciating the object of this direction, yet, after careful personal inquiries of the *employés* of these and similar societies in different countries, I have

obtained but one instance of drowning in which, during the past twenty years, the first part of this rule has been followed. That instance was when a surgeon of the Royal Humane Society happened to be himself bathing at the time of a drowning casualty, and with the forceps of the institution in Hyde-park he prised open the jaws, and, as directed, "pulled forward the patient's tongue." Regarding the remainder of the rule quoted, I have not found one instance in which either of the other directions in it have been followed. After many trials personally, I have found the procedures as directed are, for myself, quite impossible; that may help to explain the total neglect by the public and by the various societies' *employés* of the whole rule occupying such a prominent place in the published instructions. To perform the semi-rotation of an apparently dead body, or to take the necessary step forward and step backward, making besides in either method the alternate pressure directed, "about fifteen times a minute, or nine hundred times an hour," as directed, would be a feat exceedingly difficult for even a trained operator, and one which, as I think I have shown, even if accomplished, is one in every respect perhaps of doubtful expediency. The direction further on that "the above treatment should be persevered in for some hours," every body will agree is one which, if intended to be followed by the same person, might admit of revision. Laying aside the possible effectiveness of the methods contained in the published instructions referred to, I have had Humane Society *employés* on the Seine, Rhine, Danube, Thames, and on various coasts, practise upon my own person the methods in question. I am sorry to say that never but once, however, and that was in London, have either of these methods by any of these men been performed upon me as if the operator understood the *principles* of the method in question. We must all agree that the practical value of a given method to the public consists not only in the possible effectiveness of that method, but also in the ease with which it is likely to be understood and practised by the average layman.

ADVANTAGES OF THE DIRECT METHOD OVER OTHER METHODS IN DIRECTIONS ISSUED FOR PUBLIC USE.

1st. It provides for ejection and drainage of fluids, &c., from the stomach and lungs, and in such a way that each motion for ejection induces an alternate inspiration.

2nd. It excludes the tongue from the pharynx without manipulation.

3rd. It secures elevation of the epiglottis, and a post-oral air-way from the glottis to the nares.

4th. It includes a remedy against syncope and cerebral anæmia.

5th. It obtains a more general expansion of the thorax.

6th. It effects a thoracic compression which is more complete, better distributed, directed, and regulated.

7th. It is done by one person, and can be applied instantly on the spot wherever the patient is found.

8th. It is more easily understood by the illiterate.

9th. It is less fatiguing to the operator. In both rules there is but one motion; that is simple, the force employed being chiefly the weight of the operator, with intervals between each motion of complete rest. As far as weight of the operator will permit, it can accordingly be performed by any person of any age or sex.

10th. Instead of probable interruption of returning respiratory efforts, aid is accurately afforded them till the breathing becomes natural.

11th. There is no unnecessary motion or violence, with its occasional dangers, at the most critical moment.

On sending this to press, I am unexpectedly in receipt of a report of the United States Government Life-Saving Service for the year ending June 30th, 1877. After speaking of the substitution of the Direct Method for those above referred to, it goes on, in contradistinction to previous experience, to say: "*This method they* (the keepers and crews) *easily acquire and understand, and several opportunities for its application have occurred, each of which has been successful when the attempt could be made within a reasonable time.*"

SMALL-POX IN DUBLIN.—Last week the deaths from this disease amounted to twenty-one, and the cases under treatment in the various hospitals show an increase of sixteen over those of the preceding week. One hundred and six patients were admitted during the week, seventy-three were discharged as cured, and sixteen deaths occurred in these institutions.

SOUTH AFRICA AS A RESORT FOR PULMONARY INVALIDS.

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(Concluded from p. 716.)

THE foregoing remarks were intended to point chiefly to the fact that too little discretion is exercised in sending pulmonary patients to South Africa, because very little indeed appears to be known as to the special peculiarities of travelling, accommodation, and other circumstances that go to influence the health of persons accustomed to English manners, customs, and comforts, almost as much as clear air. Of the clearness, dryness, and general salubrity of the air there can be no doubt, but, as things are now, special care is required in choosing cases, prescribing the season, and describing pretty accurately the several modes of travelling.

It should be, but it certainly is not, superfluous to record most emphatically that South Africa is no place at present for pulmonary invalids in an advanced stage of disease. I have seen invalids wandering miserably about Cape Town, or have met them coming and going on board ship, whose condition indicated that no possible good could come of such a journey, because they were physically incapable of getting "up country," and so into the high and dry air that alone would give a chance of prolonged life. To send such cases out is little short of cruelty. No one should be advised to go even to Wynberg, or other places within easy reach of Cape Town, who is not well enough to be up, and in the open air for a great part of the day, and to take horse exercise. Patients may be conveniently divided into two classes: (1) those who go out merely to avoid the English winter, once, twice, or thrice successively; (2) those whose symptoms are graver, or to whom time and money are of comparatively little object, and who go out to spend eighteen months or two years in the country. In either case October is about the best month to start, particularly just now, when our English springs come tardily, and autumn weather sometimes almost reaches November. It is very important to secure a deck-cabin, for, though there are no better organised steamships afloat than many of those on the Cape mail lines, the ventilation of first-class vessels, as of West-end houses and public buildings, is frequently defective, and the heat of the tropics is often trying in many ways. It is better to embark at the final port of departure — i.e., at Dartmouth or Plymouth,—as the uncertain proclivities of the channel are avoided, and the ship is in better order than when hauling out of dock. [I have not touched upon the question of taking passage in a sailing vessel, because very few well-found ships of this class trade to the Cape.] The passage, occupying from twenty-one to twenty-three days, sometimes (I may say often) effects a favourable change, evinced by increased appetite, diminution of cough, and good nights. On arrival at Cape Town it is best to go out at once to Wynberg and secure quarters, so as to avoid any actual residence in the capital. Of the four hotels, Rathfelders has by far the best situation, and some very pleasant private sitting-rooms. (The administration, however, is very defective, but the present lease will shortly be at an end, and if some such enterprising hotel managers as Messrs. Spiers and Pond could secure the establishment, the result would undoubtedly be a financial success, because English physicians could then confidently recommend their clients to one of the most charming and healthy spots at the Cape.) Whether a single English winter or a much longer period is to be spent at the Cape, it is well to make Wynberg, or (if the sea be preferred) Sea Point, a resting-place for, at all events, some weeks. Living here will cost from 8*s.* to 11*s.* a day (without drinks), and the tariff for horses, carriages, &c., is much as in England. First, as to those who come out in October, intending to return home in April or May—who come out, in fact, as a matter of caution, or to assist a perfect convalescence — to such advice should be given, *not to rush "up country."* Young, impulsive, and energetic convalescents are almost as difficult to treat

as advanced cases. I met a man of this sort, who had planned a long journey up through Natal to the Transvaal for hunting purposes, had gone so far as to buy waggons, oxen, &c., and was with difficulty persuaded to go as far as Graham's Town, and remain there quietly, "to see how things got on." I met another young gentleman, travelling with his medical adviser, who, strangely enough, was specially recommended by a distinguished London physician to go to the Knysna, chiefly celebrated as the district in which the Duke of Edinburgh, some years ago, shot an elephant or two, but in no way, as South Africa goes, climatically recommendable; and to the Knysna, I believe, he went. A third man (a clergyman) is in my recollection as having been ordered to Pietermaritzburg, the capital of Natal, a very long journey for a weak invalid. These cases are tolerably typical as to what occurs to the majority of persons sent out to the Cape, advice being given, both in England and in Cape Town itself, without a sufficient knowledge of "up-country" peculiarities.

If, then, only about four and a half months is to be spent in the country, Wynberg (or, in some cases, Sea Point) and its neighbourhood should be made head-quarters. But a very pleasant, and probably beneficial, change may be made by travelling up to Ceres, a pretty village about seven hours from Cape Town. Most of the journey can be made by rail, and the rest by cart through Mitchell's Pass, one of the most picturesque places in the country. Or the traveller can stop at Wellington station, spend a day there, see the orange orchards of Mr. Retief, drive through Bain's Kloof (another splendid pass), and so reach Ceres across country. Here, again, the accommodation is defective and limited, but Dr. Zahn, the medical practitioner of the district, tells me that he is willing to receive two or three inmates, and I am informed that the erection of a small but comfortable hotel is contemplated by an energetic resident. If variety be a necessity, a Cape cart may be hired for, say, a fortnight, and excursions made from Ceres to Southey's Pass, Montagu Pass, &c. But all these journeyings involve fatigue, indicate expense, and had best be limited in extent and frequency.

Another but much longer excursion may, during the stay, be made to Graham's Town *viâ* Port Elizabeth, as described in the former article. Graham's Town is tolerably high, pleasantly situated, and very much anglicised as compared with other places. Several weeks here may be spent profitably, if the journey can be borne well. But beyond these trips (and these are not necessaries) no more extensive up-country journeying should be attempted under the conditions stated.

If, however, the patient is able to spend from twelve months to two years in the country, and has a good independent income, he may go farther, if only it be done deliberately and cautiously. Referring to the six modes of travelling detailed in the former article, the post-cart must of course be discarded, as dangerous, most fatiguing, and in all respects objectionable, except on the score of speed. The coach is, as a rule, very uncomfortable, and the long journeys very wearisome; so that, as time is no special object, it is well to break an ordinary six days' journey once, if not twice; finding out, if possible, the least objectionable halting-places. Coach-travelling is costly, averaging, with hotel expenses, about £2 or £2 10*s.* per day. A spring waggon, with horses or mules, is the most comfortable mode of travelling. All must be bought. Six animals at least are required, and two servants to look after them, as well as a third to superintend cooking, &c., as you are (or should be) independent of hotels. But no person should adopt this style of travelling who has not at command at least £1500 a year. Horses sicken and die; forage is sometimes scarce; the men are careless or incompetent; and various difficulties beset you unless accompanied by an experienced colonist. The spring waggon with oxen is certainly the best mode of travelling in South Africa, where speed is of no consequence. The waggon can be bought and fitted for about £130, and the oxen (ten or twelve) for about £8 each. You fit and provision according to fancy, "trek" quietly up country, averaging about fifteen miles a day. A very intelligent native of Colesberg, with whom I travelled in this way for some hours on Christmas Day (with wife, two children, and two Kafir nursemaids), calculated that the entire daily cost was about 12*s.* 6*d.*, including all expenses. The oxen usually feed themselves, though it is well to give them forage occasionally, and the Kafirs live chiefly on mealies (Indian corn). The private Cape cart is but the same arrangement as the spring waggon with horses, but on a smaller scale. There is ample room for two people, besides the driver, and for comparatively short distances it is a pleasant mode of travelling. I was told, however, by a well-known writer and traveller that, having accomplished some 700 miles in this fashion, and sold his equipage, he calculated that he and his friend between them had spent about 5*s.* a mile, without reckoning the cost of their own living during the time. If a man is sufficiently well to rough it, has gained a good and healthy appetite on the way out, or by a preliminary stay at Wynberg, and is, moreover, a sportsman, the transport waggon mode of travelling will offer many attractions. It is very cheap, but a horse should be taken, as little detours may then be made with the gun, and sometimes very good sport obtained. It may be remarked that all the varieties of travelling recommended involve continuous residence almost in the open air. But, if the right time of year be chosen for travelling, the atmosphere is so clear and bracing that this mode of life may be adopted as a matter of course, practised with impunity, and, indeed, often with very great benefit. The condition of the atmosphere is such that you unconsciously forget to think of draughts, colds, and other minor ills from which we are seldom free in moist and low-lying countries.

Next, as to the route, and the particular places towards which to travel. It is probably best to make for the high country, with a view of resting there for some time. If you dislike the sea, buy your requisites in Cape Town, send them on to the present terminus of the railway (somewhere now beyond Matjesfontein), meet them there, and trek up through the Great Karroo to Beaufort West, Graaf Reynet, Colesberg, and so into the Free State to Bloemfontein. There is an alternative northern route, that will take you *viâ* the Diamond Fields, and a southern route through George and the Knysna to Port Elizabeth. If, however, the sea is not objectionable, go by steamer to Port Elizabeth, take advantage of the railway as far as it goes either towards Graaf Reynet or Grahams Town, and then get away northward. There are many places, as to climate, quite as good as Bloemfontein, both in the Orange Free State and elsewhere. But the latter is a good geographical as well as a climatic centre, and, as I indicated before, the kind and hospitable attention accorded to visitors gives an especial charm to the quiet capital of this little republic. If any trouble or difficulty arise in a town or village through which you are passing, it is best to seek the advice of the Civil Commissioner or Landrost, from whom you will always obtain all necessary information and advice.

The actual extent of journey must, of course, be guided by circumstances of health, time, weather, and other considerations. The rainy season varies in the eastern and western districts, so it is necessary to be clear on this point, and regulate your movements accordingly. If a stay of eighteen months or two years is contemplated, it is better, as "up country" arrangements are at present, to stay quietly in what we may call the "home" districts until, say, March, and then commence the journeying. The Diamond Fields should, of course, be visited, for the climate there is as healthy, and the manners and customs of the inhabitants as quiet as those in any other district; and, moreover, there is something to see, and much that is well worth seeing. If (as I am assuming) you have your own belongings, the Transvaal is, to my mind, the pleasantest of all the South African provinces about which to wander. The climate is lovely, fruit, eggs, and milk are abundant, water plentiful, and sport, I believe, fairly good. Wakkerstroom, an isolated and forlorn-looking village towards the east, impressed me with the wonderfully invigorating quality of its air, and on taking the altitude, I found it 6000 feet above the sea-level, the maximum height scored during my journey.

It may be remarked that in these articles no meteorological data are quoted. I have, however, spared no pains to collect them, and, by the kindness of many persons in the country, have obtained fairly accurate averages of temperature, humidity, &c. as to all districts visited. I took the altitudes of all the chief towns by an aneroid, tested at the Cape Town observatory before and after the journey. But this record is written, not to dispute the very excellent climatic qualities of this section of the southern hemisphere, but to describe and explain other conditions that must affect directly all who go there—conditions as to which the profession and the public here (and even, to a great extent, at Cape Town) appear to be profoundly ignorant.

The establishment of sanitaria is, in so very large a country, the sort of question that requires a great amount of consideration. There are several places in Cape Colony that would, probably, be as climatically good as Bloemfontein, Harrismith, or many other villages far north. But none can as yet be properly called accessible, and the present disastrous war will, of course, inevitably delay the extension of railways, the improvement of roads, and many other matters that, under the experienced and energetic supervision of the present Governor, would assist to promote the prosperity of South Africa in every possible way. As to the immediate present, the improvement of hotel and other accommodation about Wynberg (and specially in the neighbourhood of Rathfelders), at Ceres, and at Grahams Town, would afford a material guarantee to physicians that, as their clients cannot live upon air alone, those sent out may be certain of securing other and material aids to health. From personal observation, as also from the evidence of Messrs. Donald Currie's agents and others at Cape Town, it appears that during the last two years (i.e., since the speed of the steamers has increased, and the weekly service commenced) the number of invalid travellers has increased by at least 40 or 50 per cent.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

CASE OF SCIRRHUS CANCER OF THE BREAST IN A MAN.

(Under the care of Mr. CHRISTOPHER HEATH.)

FOR the notes of this rare and interesting case we are indebted to Mr. A. J. Pepper, late surgical registrar.

W. F——, forty-seven years of age, but looking older, was admitted on Nov. 8th, 1877, with a tumour of the left breast. He had, he said, been accustomed to strike his thorax for amusement, and to this he attributed his disease. This began four years ago with pain, soon followed by a lump, which steadily got larger until eighteen months ago, when he went to a special hospital and had caustic applied. This only aggravated his condition, and from that time the tumour made rapid strides, the wound caused by the caustic never having properly healed. The patient's family have all been healthy; no history of cancer.

On admission the following notes of the case were taken. Patient is a stout, healthy-looking man, and complains of nothing but local pain and discomfort in the breast. With the exception of moderate emphysema of the lungs, the viscera are healthy. In the left breast there is a large fungating tumour, the size of a double fist, measuring six inches from above down, and four inches from side to side. The ulcerated surface is very rugged, and covered with adherent fetid slough. The skin at the border of the ulcer is adherent to the growth beneath. The tumour can be moved over the subjacent pectoral muscle. Its outline is fairly well defined and somewhat lobulated. The superficial veins over the upper part are slightly enlarged. The axillary glands are larger than natural, and can be very distinctly felt. The supraclavicular group are unaffected. The mammary tumour appears to be solid throughout. The patient complains of occasional shooting pains in the breast; the latter is entirely involved in the disease.

On November 14th Mr. Heath removed the entire mass by a double elliptical incision made about three-quarters of an inch from the margin of the tumour. A deep-seated adhesion to the pectoral muscle, limited in extent, was found to exist, so that some of the fibres of the muscle had to be excised. Two lymphatic glands were then shelled out from the axilla, the vessels were ligatured, and the wound dressed with boracic lint, and strapped. Two days after the operation the dressing was removed. The wound then looked sloughy, and was surrounded by an unusual amount of inflammatory œdema. Temperature 103·6°; pulse 126.

With the exception of rather severe febrile disturbance, probably due to a little pent-up pus, all went well until Dec. 6th, when a chill occurred, which lasted a quarter of an hour. Aching pain in the limbs was complained of. Temperature went up to 102° F., and there was complete anorexia. Next day the general condition was better, but an erysipelatous rash was noticed on the back, extending from the posterior part of the operation wound. On the 8th the rash had faded. Temperature 99°.

On Dec. 24th the wound was covered by healthy granulations; measured 5 in. by 3 in. The axilla was occupied by a firm mass, but whether due to recurrence of growth or to inflammatory induration could not with certainty be told. He left the hospital at his own request.

When seen a month after his discharge, the swelling in the axilla had greatly subsided, but the glands could be felt distinctly enlarged. Wound superficial and much smaller.

Remarks.—In man scirrhus cancer of the breast is far from common. Paget gives the probable frequency, as compared with that in women, as one in fifty, and this proportion is certainly not overrated. The wide difference is doubtless to be explained by the fact that in the male the gland is not subject to vicissitudes of functional and nutritive activity as in the female. The same holds good also as regards simple or benign growths, such as adenocele. In the present case, the patient attributed his disease to a habit he had of "beating his hand against his chest." Too much stress, however, must not be laid on this, as it is well known how almost invariably the laity account for their ailments in some way or other, even when the surgeon can trace no causal relation. The pernicious result of applying caustic partially, and so ineffectually, was here observed; for before this treatment was resorted to, the tumour had grown steadily and slowly; whilst afterwards a rapid advance was made, and a foul, fetid sore induced. The axillary glands were enlarged, but whether from simple irritation or by specific growth it was difficult to decide; and in a case like the present, where the primary tumour could be completely removed, and the patient, for a time at any rate, be rid of a loathsome, fungating ulcer, the propriety of operating could not be called into question, even though a probable recurrence of the disease must be anticipated. The duration of the disease was noteworthy, four years having elapsed since it was first noticed; for eighteen months the skin had been broken, and as yet no evidence of constitutional taint was manifested.

On microscopical examination the tumour was found to present the usual characters of scirrhus, and the axillary glands were invaded by the same.

HOSPITAL FOR SICK CHILDREN.

GANGRENE OF THE LUNG, FOLLOWING TRACHEOTOMY FOR DIPHTHERIA.

(Under the care of Dr. CHEADLE.)

FOR the following notes we are indebted to Dr. R. A. Gibbons, house-surgeon, who performed tracheotomy and had the main charge of the case.

C. L——, aged five years and eight months, was admitted on March 30th. The rooms of the house in which she had lived were draughty, but the surroundings were healthy and the drainage good. She had had a cold and cough for a fortnight, but was able to go about. Three days before admission she became a little hoarse, and that night awoke with cough and shortness of breath. Next day the hoarseness was worse and the cough was weak. She swallowed well all along. The breathing became affected for the first time the night before admission, the difficulty of breathing increasing till the morning, when there was great dyspnœa, the child being very blue, cold, and aphonic, but conscious. There was a small patch of membrane on the right tonsil, and another behind the left; the glands in the neck were not enlarged; and there was a purulent discharge from the right nostril.

Dr. Gibbons at once performed tracheotomy, as there was no time to be lost. The trachea, which was opened below the isthmus of the thyroid, was very deeply seated, and a large plexus of veins lay in front of it. A bivalve tube, with an inner one, was inserted, and immediately afforded much

relief. The child's legs remained cold for about two hours. A stimulating mixture of carbonate of ammonia and aromatic spirits of ammonia was given, and she afterwards had eight grains of chlorate of potash and six drops of the tincture of perchloride of iron in syrup and water every four hours. Air entered the chest well, and there was no sinking in of the bases. A few diffused bronchitic râles were audible, but there was no dulness anywhere. Urine slightly albuminous, with hyaline casts. Temperature in the evening 101°; respiration 30; pulse 138.

She passed a restless night, and the following morning, as she became blue and had great difficulty in breathing, a larger tube was inserted, and soon afterwards she expectorated through it a piece of coloured tough membrane an inch and a half long and about a third of an inch broad. It had many small apertures and longitudinal thickenings forming striation. Besides this several smaller pieces were brought up. The breathing was much easier afterwards, and the child took her food well. There was no difficulty in swallowing. Temperature: Morning, 98·6°; evening 101·6°. Pulse: Morning, 158; evening 144. Respiration, morning and evening, 36.

April 1st.—In the evening her breathing again became laboured, and it was evident there was some obstruction. After a second dose of an emetic—carbonate of ammonia and ipecacuhana wine—she vomited and strained, expectorating through the tube a large piece of false membrane, thinner than the earlier pieces, but a complete cast of the trachea. Temperature: Morning, 98·4°; evening, 99·4°. Pulse: Morning, 132; evening, 144. Respiration: Morning, 33; evening, 36.

On the 3rd sibilant râles were heard all over the chest; a few coarse rhonchi at both bases, especially the left, where air did not enter so freely. She brought up some more membrane; wound healthy. Temperature, morning and evening, normal. Pulse: Morning, 130; evening, 144. Respiration: Morning, 28; evening, 42.

On the 4th the membrane had quite gone from the tonsils; urine was not albuminous. Temperature: Morning, 98·4°; evening, 101·6°. Pulse: Morning, 120; evening, 128. Respiration: Morning, 24; evening, 36.

On the 6th the tube was removed; the child breathed well through mouth and nose. Temperature: Morning, 100·6°; evening, 102·6°. Pulse: Morning, 126; evening, 128. Respiration: Morning, 24; evening, 26.

For the next three days her progress was satisfactory, and there was no occasion to replace the tube, but the wound and sputa now began to smell offensive, and the temperature, which had ranged from 98·6° to 103°, was higher than it had previously been. On the 12th it was 104·2°. She vomited six times, and had diarrhœa, but the wound looked clean and healthy, and was evidently not the cause of the offensive odour.

On the 13th the sputa were abundant and quite gangrenous in odour, and the breath also was offensive, especially after expectoration. The child was pale, and evidently weaker. Temperature: Morning, 104°; evening, 102°. Pulse: Morning, 138; evening, 116. Respiration: Morning, 40; evening, 64.

On the following day she was very restless, and breathing badly. Respiration 56; pulse 160; temperature 103·2°. Diarrhœa and sickness continued; breath horribly offensive. She gradually became weaker, and died early on the morning of the 15th.

Necropsy.—Body well nourished; wound not sloughy; the tissues about the front of the trachea were infiltrated with serum, but there was no formation of pus. The lining membrane of the trachea was of deep purple-red colour, soft and offensive. In some spots the cartilage was exposed, mucous membrane having ulcerated. The anterior portion of the rings of the trachea below the wound, for an inch and a half, was softened and disintegrated, gangrenous. There was intense purple congestion of the trachea and bronchi of both lungs. Above the aperture in the trachea the larynx was perfectly healthy; no membrane. Left lung congested; no adhesions; bronchi full of pus; a section of the lung smelled very offensive. Right lung: Pleura adherent; lower and anterior part of the upper lobe excavated into a small trabeculated fibroid cavity, with offensive contents; pleura here closely adherent, thickened; the gangrenous process having apparently ceased. Most of the rest of the lung consolidated; pneumonic, but with no signs of breaking down. Bronchi of this lung also intensely congested and full of pus; a third division opened into the cavity mentioned. Liver, 32 oz., decidedly fatty and large. Kidneys soft, as from incipient decomposition; the capsule tears up the cortex. Other organs natural.

Remarks.—The case is interesting, as showing that, notwithstanding the severity of the disease for which the operation was undertaken, it was successful, and the child recovered completely, as far as the larynx is concerned, post-mortem examination proving that organ to be perfectly healthy. Recovery after expectoration of casts of the trachea, where tracheotomy has been performed, is rare, and it is therefore unfortunate in this case that gangrene supervened. Looking to the state of the trachea after death, the cause of the lung affection must have been the tracheotomy-tube. The end of the tube set up irritation in the trachea, inflammation and suppuration ensued, and the pus, decomposing, was sucked into the alveoli of the lung, leading at first to lobular pneumonia, which, owing to its septic properties, terminated in gangrene. The tube, however, was not too large, and appeared to be quite comfortable; there were no signs on the posterior wall of the trachea of its having caused local pressure. Such cases must be very rare, as neither Jenner nor Trousseau mention any.

PETERBOROUGH INFIRMARY.

TWO CASES OF STRANGULATED HERNIA.

(Under the care of Dr. T. J. WALKER.)

FOR the following notes we are indebted to Dr. Illingworth.

CASE 1. *Strangulated hernia; operation; secondary operation; radical cure.*—William W——, aged forty-six, mason, a strong, muscular, healthy-looking man, was admitted on August 27th last with a strangulated inguinal hernia on the right side. He had been ruptured for seven years, and, except at night, had worn a truss for the last three years. On the evening of the 24th he had an attack of vomiting, which caused a large portion of bowel to come down. Attempts to put it back failed, so the surgeon in attendance sent him to Peterborough. There was stercoraceous vomiting every few hours, but not much pain in the swelling. Dr. Walker tried taxis, both in the ordinary recumbent position and with the patient slung head down over the shoulders of two men, but without success. Chloroform was given to complete anæsthesia, and, taxis again failing to procure reduction, it was determined to operate. An incision was made about three inches long in the longitudinal axis of the tumour over the internal ring, and the tissues divided layer by layer down to the sac. On opening the sac there was a gush of clear serum, and the knuckle of bowel it contained was about six inches in length, dark, congested, and at some points covered with recent lymph. The constriction at the ring having been divided in the usual way, the bowel was easily returned. The edges of the wound were brought together by interrupted sutures of silver wire, a pad of dry lint and cotton-wool was applied and secured by a spica bandage, and the patient carried to bed. He was ordered milk, soda-water, and ice, to drink, with an effervescing saline containing the glycerine of carbolic acid for the vomiting. He slept badly, and the stercoraceous vomiting still continued in the morning.

On the 28th, at 11.45 P.M. (thirty hours after the operation) the bowel was found down. Dr. Walker was sent for, and on arriving removed the uppermost sutures, opened up the wound and sac, and returned the bowel. He then with a curved needle passed two sutures of Lister's prepared catgut from without, across the neck of the sac, close up to the ring, bringing them out external to the spermatic cord, and fastened them tightly over the external incision. The patient passed wind soon after the operation, and about half an hour afterwards a brownish fluid motion.

The patient vomited once or twice during the night, but at longer intervals than before; the vomited matters were greenish, not brown, and the odour not feculent; the bowels were moved five or six times, the quantity passed increasing each time. The temperature the next morning (the 29th) was 101·6°, after which it gradually fell to the normal. The patient was comfortable, and had no pain in the bowels. There was slight pain in the bowels for about an hour in the afternoon. In the evening (29th) there was considerable inflammatory thickening of the tissues of the groin and

scrotum, the skin being hard and red, especially round the sutures. Behind and to the right of the testicle there was a rounded, elongated body, extending up to the ring, and of a doughy consistence (coagulable lymph filling up the remains of the sac). The wound was dressed with lint kept wet with dilute carbolic lotion.

The catgut sutures were removed on the fourth day; the elongated body behind the testis became gradually harder and smaller, and the wound rapidly healed. Three weeks after the operation the patient was allowed to get up with a pad and spica and loosely-fitting truss, and in three more days discharged. At the end of a fortnight the pad and spica were discontinued, and a tightly-fitting truss was applied.

On examination on Feb. 9th, five months after the operation, there was no hernial protrusion even on coughing, although an impulse was felt with the finger at the ring. The patient was advised to continue wearing a truss.

CASE 2. *Strangulated inguinal hernia; reduction of the bowel by taxis; occlusion of the neck of the sac, and formation of a tumour by the serum.*—Mary B——, aged forty-four, a tall, spare, healthy woman, was admitted on Jan. 26th. Mr. Tomlinson, the medical man in attendance, gave the following history. On the 21st, the patient, who had been previously the subject of rupture, was attacked with violent pain in the abdomen, and on examination he found a strangulated inguinal hernia, about the size of a hen's egg, which he succeeded in reducing by taxis, with relief to all the symptoms of strangulation. Two days later he again saw the patient, and found the hernial sac tense, distended to the same size as before the reduction of the bowel, and the seat of pain; but the patient had no pain over the abdomen, was not vomiting, could pass flatus per anum, and presented no other indications of strangulation. Mr. Tomlinson was unable to return the swelling by taxis steadily persevered with for half an hour, although he believes that he reduced its size somewhat. On the following morning taxis was again tried without success, and on the next day the patient was sent into the infirmary.

On admission there was a rounded, hard, elastic swelling, about the size of a duck's egg, at the inner part of the left groin, corresponding to the situation of the external abdominal ring. The tumour was the seat of pain, and tender on pressure. The patient stated that the bowels had acted on the previous morning. She was not sick, nor did she complain of pain in the abdomen beyond the immediate situation of the swelling. Her tongue was thickly furred. Pulse and temperature normal. She was placed in bed, and an evaporating lotion applied to the tumour, which gradually grew less, and on the 30th had disappeared.

On March 2nd there was no sign of any tumour in the region, and no impulse on coughing.

Dr. Walker remarked that this was the third case he had met with in which, a hernia having become strangulated, and the bowel having been reduced, the neck of the inflamed sac became obstructed by the congested and swollen omentum, which had formed a part of the contents of the sac, and had *not* been reduced by the adhesive inflammation set up. The sac consequently was distended by the serum secreted in it, and, becoming tense and painful, suggested to the surgeon in attendance that strangulation of the bowel had again occurred. In the other two cases the treatment had been the same as in this, and the symptoms gradually subsided, but in each case a small hard irreducible tumour was left, being apparently the adherent plug of omentum, which had given rise to the symptoms.

This condition following strangulation of the bowel in cases of entero-epiplocele is not alluded to in treatises on hernia; but that it may be a source of much anxiety to the surgeon, and of pain and discomfort to the patient, is shown by Dr. Walker himself having three times had such cases brought under his notice.

ROYAL COLLEGE OF SURGEONS, IRELAND.—The thirty-fifth annual report of the Council of this institution shows that during the year ending 5th April 5 candidates were admitted to the fellowship, 99 received the diploma in surgery, and 8 the diploma in midwifery. The entire number on the lists of the College amounts to 402 fellows and 2914 licentiates. It has been determined that during the visit of the British Association in Dublin this year a *conversazione* will be held by the College on Monday evening, the 19th August.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Pathology of Hæmophilia.—The Pathological Traces of Pulmonary Hæmorrhage.—Brain in Congenital Absence of One Hand.—Abscess within Thorax, accompanied by Pulsation.

THE ordinary meeting of this Society was held on the 14th inst., Dr. C. West, President, in the chair. Several papers were read, one by Mr. Kidd, dealing with the vascular changes in hæmophilia, and illustrated by numerous microscopical preparations; another by Dr. Reginald Thompson, upon the pathological effects of hæmorrhage into the lung; a third by Dr. Gowers, a contribution to the doctrines of cerebral localisation; and a fourth on a case of intrathoracic abscess simulating aneurism, by Dr. Topham.

The following is an abstract of the paper, entitled "A Contribution to the Pathology of Hæmophilia," by P. KIDD, B.A. Oxon., demonstrator of practical physiology at St. Bartholomew's Hospital. A description is given of a case of hæmophilia in a child six years old, in which fatal hæmorrhage occurred from the mucous membrane of the mouth. A short clinical history of the case is given, with an account of the post-mortem examination. The blood was examined, and was found to be very watery and to contain a large excess of colourless corpuscles. A microscopical examination was made of the aorta and vena cava, and of that part of the mucous membrane of the mouth from which the fatal bleeding took place. This examination revealed an extensive affection of the small vessels, arteries, veins, and capillaries, especially the smallest veins. This affection, which mainly consisted in a great proliferation of the endothelial cells lining the vessels, was seen in the small vasa vasorum of the aorta and vena cava, as well as in the vessels of the submucous tissue of the mouth. The coats of the aorta and vena cava themselves were healthy. Drawings are given of the affected vessels, and also of a portion of the surface epithelium of the mouth, which has undergone a peculiar change, described at length in the paper. A certain number of small arteries of the oral mucous membrane have undergone a further change in addition to the endothelial proliferation. This consists in a degeneration of their muscular coat, which is seen to contain only a very small proportion of its normal structural elements. The conclusion is drawn that in this case there is a general disease of the small vessels. But as the blood was also affected, there still remains the question whether this is primarily a disease of the blood or of the bloodvessels.

Dr. REGINALD E. THOMPSON then read a paper on the "Pathological Traces of Pulmonary Hæmorrhage," of which the following is a brief abstract:—The traces of pulmonary hæmorrhage most frequently found in the lungs after death are small rounded or ovoid masses, which vary in size from a pin's head to a filbert, and vary in colour, according to their age, from a blood-red to an ivory-white. They are smooth, firm, and tough in texture, and are found to consist of blood-corpuscles and fibrin, packed closely in the alveoli. Their position is peculiar, and the special localities which they haunt indicate that the force of inspiration is the active power by which the blood is impacted in the alveoli. Hence these traces indicate hæmorrhage transferred from some other distant part in the lungs. Their future condition appears to depend upon the absence or presence of other pulmonary disease. There are other traces which indicate extravasation of blood *in situ*. In these cases, which are more rarely met with, there is considerable pigmentation of the neighbouring tissue and occasionally laceration. In either case, whether the blood be transferred from a distance or deposited *in situ*, softening and elimination may occur, so that a cavity may be the result; but it is very difficult to form an opinion with reference to the relation of these hæmorrhagic deposits and tubercle.—Dr. SYMES THOMPSON thought the paper of great value as showing the pathological side of a difficult problem, which it was almost impossible to solve upon clinical grounds only, for the rapid advance of cases of pulmonary disease after the occurrence of hæmor-

rhage could be interpreted on either view—viz., that the hæmorrhage was sequential to previous disease, or was the starting-point of the subsequent disorganisation.—Dr. C. T. WILLIAMS said that in post-mortem examinations after death from hæmoptysis, the cause of the hæmorrhage was sought for rather than its results. He had hitherto regarded the "putty-like" masses described in the paper as due to altered blood, as being rather the result of local pneumonia. He was glad to find that the author had cautiously avoided giving any decided opinion in favour of phthisis ab hæmoptoe, apart from any previously existing tubercle.—Dr. DOUGLAS POWELL regretted that, owing to the advanced period of the session, the paper could not receive the full discussion it merited. He doubted whether there was such a difference in the inspiratory power of different parts of the lung as had been assumed in the paper; for although undoubtedly the upper part of the thorax expands to a less degree than the lower, yet it must be remembered that, owing to the conical shape of the lung, the actual amount of expansion undergone by a given area of the organ at the apex was probably as much as that of the same area at the base. He was aware that this assumed difference in the expansion of different parts of the lung had been used as an argument to account for phthisical changes commencing at the apex. The caseous masses, which he had usually believed to be due to caseous pneumonia, had been shown by the author to be due to changes in effused blood, and his specimens and drawings served to bear this out. Still, he hoped that Dr. Thompson would continue his researches in this direction, and bring forward more evidence in support of his views. One difficulty in accepting them lay in the fact that blood should remain so much unaltered for so many months after it had been effused.—Dr. R. E. THOMPSON, in reply, said that he had found evidence of blood-colouring matter even in the "mortar-like" masses so often met with. He could not agree with Dr. Powell that the inspiratory force was the same in all parts of the lung; and he thought this was shown by the fact that the nodules resulting from inhalation of blood were not so firmly packed at the apex as elsewhere; and he had observed that in the female such nodules at the apex were larger and more numerous than at the lower border of the lung. Out of 20,000 cases which had passed under his care during eight years, in only two had he been able to satisfy himself that phthisis was distinctly due to hæmorrhage. One was a case of hæmoptysis from heart disease, the other one in which hæmoptysis followed upon violent muscular effort.

A communication was then made on a "Brain in Congenital absence of one Hand," by W. R. GOWERS, M.D. The subject was a man in middle life. The left hand was absent from birth in front of the carpus, the carpal bones being imperfectly developed and united. They were covered with a fibrous capsule, into which most of the forearm muscles were inserted. None of them were absent, except the extensor minimi digiti. The ganglia at the base of the brain were equal in size. The convolutions of the frontal lobes were equal in size, including the ascending frontal convolution. The middle third of the ascending parietal convolution on the right side was only half the size of the corresponding part of that on the left. The upper and lower extremities of this convolution were equal on the two sides. Microscopical examination showed no alteration in the structure of the affected part, the smaller convolution having layers of grey substance of the same thickness, and presenting cells as numerous and as conspicuous as the other. The only difference was in the extent of the convolution. The other convolutions of the parietal and occipital lobes were equal in size. It was pointed out that the smaller area is precisely that stimulator which, by the experiments of Ferrier on monkeys, causes movements in the hand which was in this case wanting. The absence of any change in the structure of the convolution might be due to the persistence of all the forearm muscles, or to representation and localisation in the brain being not exclusive, merely preponderant.—In reply to Mr. Nunn, Dr. Gowers said that the mode in which the ulnar and radial arteries terminated was not ascertained. Their arrangement in the forearm was natural.

A paper was then read on a "Case of Abscess within the Thorax, accompanied by Pulsation," by JOHN TOPHAM, M.D. The enlargement—which was consequent upon a blow from a mangle received by a laundress, aged twenty-one, in March, 1871—was not noticed till nine months after, having been preceded by pain in the part injured at six months from the accident. There was a hemispherical enlargement at the left margin of the sternum between the third and fourth ribs, pulsating synchronously with the heart. Both heart-sounds were audible through the swelling. The conclusion arrived at by the author was that the case was one of abscess, but it being supposed to be aneurism, the patient was confined to bed in an infirmary during three years, the enlargement becoming gradually larger. At the end of six months both sounds of the heart became audible in the back. Pressure did not change the size of the swelling, but the skin became inflamed over the prominent part. In June, 1876, ulceration having set in, there was a discharge of thick pus, followed by a quantity of cheesy-looking substance, consisting, under the microscope, of large round corpuscles, resembling white blood-corpuscles, or those of pus which were undergoing fatty degeneration. Both sounds of the heart were audible in the back; pulse at wrists irregular (between fifty and sixty a minute); systolic murmur at heart's apex, none at base; loud "bruit du diable" in neck. At the lower outer edge of the sterno-mastoid a loud bruit with first sound, but louder and of higher pitch on the left. Patient left infirmary, and in March, 1876, the heart was in natural position and sounds natural, but pulsation irregular. In November, 1877, there was still occasional discharge from the aperture, but the patient, now a domestic servant, is able to labour at her employment.

An abstract was read of a paper by Dr. BENJ. HOWARD, formerly surgeon of Long Island College Hospital, New York, entitled "An Anatomical Remedy against Respiratory Obstruction from the Tongue, Epiglottis, and Velum Palati in threatened Apnœa from Anæsthetics or other causes." The object of this paper was to give the results of various and repeated investigations and experiments. The facts to be presented confirm the alleged respiratory obstruction from the tongue, epiglottis, and velum palati, in apparent death, in the ordinary supine position, and show such obstruction is promoted by the customary elevation and flexion of the head and neck; that traction upon the tongue, however firm, may open the pharynx its retreat had closed, but nothing more; the epiglottis remains unlifted. Other facts are then presented, proving how, by simple position, all these obstructions are instantly and simultaneously removed. The position consists in elevation of the thorax and complete extension backward of the head and neck. By this means the line of gravitation of the tongue is shifted from the back of the pharynx to the hard palate at or about its junction with the soft palate. The entire posterior wall of the pharynx is shifted backward, its anterior wall is shifted forward; thus its antero-posterior diameter, as much as is possible, is throughout increased, while by the shifting upward and backward of the nares their entrance is brought more directly over and in a line with the course of the pharynx. The larynx being pulled downward and forward by the sterno-thyroidei muscles and fixed there, the extensive motion upward and backward of the lower jaw puts upon the stretch the genio-hyoidei, myo-hyoidei, and anterior bellies of the digastric muscles, causing the hyoid bone, and by means of the hyo-epiglottic ligament, the epiglottis, to share together the motion of the jaw. Thus the epiglottis is instantly made vertical. The thyroid insertion of the palato-pharyngei muscles being brought downward and forward by the sterno-thyroidei and fixed, the palato-pharyngei muscles are put upon the stretch their whole length by the extensive movement upward and backwards of the head, and thus the posterior pillars of the fauces, the arches of the palate, and the velum palati, into which latter membrane these muscles are inserted, are all pulled downward and forward. They are thus made tense and kept so. The velum being thus stretched some distance in front of the back of the pharynx, a post-oral air-way is secured from which the tongue is doubly excluded. Hitherto, in the treatment of apnœa or asphyxia, the tongue has been withdrawn only in those exceptional cases where a surgeon with forceps has been present. The means of complete elevation of the epiglottis in apnœa cases have been hitherto unknown. The position described removes both these obstructions without assistant or instrument. The author, from the facts given and from other experience, urges that always, in the induction and condition of anæsthesia, the head rests rather lower than the shoulders, and states that complete extension backwards of the head and neck should be the first and instant measure in threatened or actual apnœa, both as a remedy and as the first step towards success in artificial respiration. The withdrawal of the tongue when practicable the author considers highly advantageous, though not neces-

sary; but it should incur as little lowering of the inferior maxilla as convenient. Finally, the author claims to have demonstrated that, contrary to the general belief, traction upon the tongue, however firm, cannot materially elevate the epiglottis. That he has discovered a simple way by which—1st, the tongue is excluded from the pharynx without manipulation; 2nd, the epiglottis is elevated vertically at will; 3rd, an unobstructed post-oral air-way is secured from the glottis to the nares, all of which is effected simultaneously by position alone. These facts have received full corroboration from recent observations upon patients under anæsthetics; and the author is glad to believe that in averting apnœa, in restoring from apnœa, and in enabling various means of artificial respiration to be used more effectively, the simple measure above directed will be a frequent means of saving human life.

Reviews and Notices of Books.

A Compend of Diagnosis in Pathological Anatomy. By Dr. JOHANNES ORTH. Translated by F. C. SHATTUCK, M.D., and G. K. SABINE, M.D. New York: Hurd and Houghton. London: Trübner and Co. 1878.

IT may seem strange that so few books have been written at present as guides to the post-mortem room, whilst dissectors' manuals abound. The student of practical morbid anatomy has to seek instruction as well as he can without the assistance of a guide-book. Nor is this much to be regretted, for the study of morbid anatomy is not that of the dissecting-room; it is fragmentary, and to a certain extent inconstant, and can best be pursued by oral instruction and demonstration, with the practical performance of investigations in the dead-house itself. The knowledge there gleaned from day to day must be pieced together afterwards by the student himself in his reading and attention to lectures. For those, however, who have passed their student days, and who in their busy practice can find time to occasionally revert to morbid anatomy, some such guide as the present is doubtless welcome, and to the teacher himself it will be found of much value. The author, who has, we believe, just been transferred to Strasburg, was first assistant in the Pathological Institute of Berlin, and we may therefore regard this book as containing a complete exposition of the method of procedure and the results of study in the school of which Professor Virchow has so long been the distinguished head. About a year ago Professor Virchow himself published a brief manual of directions for the post-mortem room, especially intended for medico-legal purposes, but full of admirable suggestions. Dr. Orth's work has a wider application, for he has grounded upon outlines of the mode of procedure in the dead-house a succinct summary of all the morbid lesions which might be presented to the observer.

That great care has been bestowed upon the book to make it complete and exhaustive is obvious; but, at the same time, the very endeavour to compress all morbid anatomy within a handbook of this class must of necessity involve curtailment in description where full details are required, and, on the other hand, lead to too ample an exposition of pathological rarities. Hence the usefulness of the book is slightly impaired. We may quote, as an example of the manner in which the work treats of the subjects it discusses, that section of it which deals with the heart, premising that, so far as possible, the subjects treated of are taken in the order in which they would come under notice in making an examination; first the head, then the thorax, and lastly the abdomen and pelvis, being thoroughly explored in all their parts. The section on the Heart (pp. 111 to 132) begins with an account of its external examination; the position, form, and size of the organ being noted, with its colour, consistency, degree of distension, &c. Directions are then given for opening the heart *in situ*—a proceeding not always followed in this country; and an illustrative plate showing the requisite incisions is annexed. A digression is then made to discuss the morbid conditions of the blood, and the section concludes with detailed descriptions of the various diseased conditions of the heart and aorta. The same method is pursued systematically with regard to other organs of the body. The book is, on the whole, a very fair guide to the practical pathologist.

OUR LIBRARY TABLE.

Army Medical Organisation: a Comparative Examination of the Regimental and Departmental Systems. By Surgeon-Major G. J. H. EVATT, M.D., Army Medical Department. Third Edition; pp. 48. London: J. and A. Churchill.—We are glad to see that Messrs. Churchill have brought out an edition of this pamphlet. The two previous editions were published in India, and there was a difficulty in procuring copies in this country. This is now removed. We reviewed the second edition at some length when it first reached us (THE LANCET, Nov. 3rd, 1877), and, as this appears to be merely a reprint, it seems unnecessary to go over the ground again. We shall content ourselves therefore with repeating the opinion then expressed, that "it may be advantageously studied by all who take an interest in the important question of the organisation of the medical service of the army. It bears evidence of careful thought, a just appreciation of the requirements of the service, and a practical knowledge of its details."

Revue Mensuelle de Médecine et Chirurgie. Deuxième Année. Nos. 4 & 5. Paris: Baillière. 1878. — The number for April 10th contains—(1) Contributions to the Study of Acute Myelitis; Case of Myelitis with Apoplectiform Onset, by Drs. Proust and Joffroy. (2) Vesico-intestinal Fistula following an Invagination, by P. Bruchet. (3) On some Peculiarities observed in the Development of Mumps, by E. Sorel; a Case of Chronic Ulcerating Papillary Dermatitis, by L. Dumenil; a Case of Ophthalmic Migraine, of Twenty-five Years' Duration, Treated and Cured by Hot-air Bath, by L. A. Bonnal; Salivary Calculus discharged through the Duct of Steno, by L. Magnan and La Suivre. There is also a review by M. Reynard of Paul Bert's researches on barometric pressure, and an extended series of notices of new works. No. 5, for May 10th, opens with a paper by H. Dor, on Cataract in Diathetic Conditions, especially in Phosphaturia; one by A. Perak, on Icterus Neonatorum, especially with reference to the time at which the umbilical cord should be ligatured; a Case of Tumour of the Velum Palati is related by M. Mercier, and Coirat and Lepine give details of a case of Primary Cancer of Lymphatic Glands. An abstract of M. Charcot's lectures on the "Pneumonokonioses," or dust-diseases of the lungs, is supplied by M. Gombault, and several reviews of recent medical and surgical works complete the number.

The Cape and South Africa, with a Map. By JOHN NOBLE, Clerk to the House of Assembly, author of "South Africa, Past and Present." Cape Town: J. C. Juta. London: Longmans and Co. 1878.—This little work is classed as an official handbook, having been prepared at the request of the Commissioners appointed by the Cape Government for the representation of the colony at the Paris Exhibition of 1878. The agricultural resources, animal life, geological and general history, native tribes, political and civil institutions, physical aspects, &c., are tersely but very clearly described, and there is a capital index. Our South African possessions have lately attracted so much attention that this small book is at the present time specially welcome, particularly to intending emigrants. Farmers—in fact, all practically concerned with the future of this interesting colony, will gain much useful information by a perusal of Mr. Noble's book.

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THE LANCET.

LONDON: SATURDAY, MAY 25, 1878.

THE Scotch medical corporations have given another proof to the world that they have great influence with the Lord President in respect to the present Medical Bill. The whole profession is desirous of an examining board above all suspicion. Most people that have thought out the evils and injustice of the existing system of examinations have come to the conclusion that its chief evil is that it is bound up with the pecuniary interests of the medical corporations. The more persons the examining boards pass, the more money they receive, and to expect even a medical corporation to be above such a consideration is to betray inexperience. This love of money is not confined to any one medical corporation—it inheres in corporations; even the Scotch corporations are not free from it. The whole force of the argument for Conjoint Schemes is in the fact that, according to the prevalent view, the Universities will be brought into them—institutions which are supposed to be comparatively independent of money considerations, and eager for the promotion of higher education. In the English scheme at least—greatly imperilled, we fear, by recent and current proceedings — the English Universities, though included, have no pecuniary interest at all. They are to receive no money for their share in the regulations of the examinations of the Conjoint Board. More than this, they forego a much prized privilege—the power at present possessed of giving qualifications to practise. When bodies give up much and receive nothing, in order to promote a public advantage, they revive faith in public spirit, and deserve praise.

Judging from the statement of the Duke to the Medical Defence Association on Monday last, he is prepared to introduce amendments into the Bill which will compel the corporations to form conjoint schemes, but not the universities. We gather from the remarks of the Lord President that he does not intend to interfere with the privileges of the Universities of granting qualifications to practise in the form of degrees, as at present. It may easily be imagined that the degrees will be sought after in preference to the diplomas of the Conjoint Board, as conferring not only qualifications to practise and the right to be registered, but titles which are very much prized. By such amendments we shall have not only, as now, a competition of corporations, but a competition between universities and corporations, the tendency of which will be rather to lower the standard for degrees than to raise the standard for diplomas to practise.

But, apart from this, the Duke's amendments will be deeply disappointing to the profession. They will compel the conjunction of that set of bodies only which are most deeply interested in the retention of the existing system of educating and examining, which involves so much bad teaching and such disastrous results at the examining boards. The financial differences in the position of the English, Scotch, and Irish bodies will entail corresponding differences in the cost of the diplomas. Uniformity of cost will be out of the question. Will there be any security of equal severity in the tests? He must be a bold man who would say that there is any such security, especially if the Medical Council's objection to Clause 14 of the Duke's Bill is to lead to the abandonment of the clause. Next to our surprise at the original omission of clauses for compelling conjoint schemes, which the Duke explained by the existence of "certain Scotch difficulties," is our surprise at the proposal to compel conjoint schemes without the universities, which are the chief securities that we shall have the minimum standard of examinations raised. As we set out by saying, this is another concession to Scotch feelings, which may well make our northern friends rather more vain than they were made by the original compliment paid to them by the Lord President.

But it is high time to ask whether Scotland is to rule in such an Imperial question as this? This is no mere Scotch question. Scotland—to her credit be it spoken—educates and examines a large proportion of the practitioners in England. Probably at the present moment she is educating something like 2000 medical students, most of whom will find their sphere of duty in England. Scotch diplomas confer the right to practise south of the Tweed as freely as north of it. Why, then, should Scotland decline securities for the elevation of the minimum standard of medical examination? and when she does so, why should her feelings be allowed to dominate, contrary to the views of the majority of the Medical Council, of all the Crown members of the Council but the Scotch member, and of the general body of the profession? What would Scotland think of a return to the old system of territorial qualifications? How would she regard legislation that would deny the validity of the qualifications of Dr. ANDREW WOOD or Dr. GAIRDNER to practise in London? She would justly and indignantly resent a return to such an antiquated and absurd state of things. But if Scotland is to pour practitioners of her own educating and examining into England, why should she shrink from conditions thought essential in England for the elevation of the minimum standard? Why should she, in the interest of her corporations, oppose the interest of the public and of the profession? She may think that she can do so with effect. It must be allowed the noble author of the Bill shows great deference to her feelings. But such deference will, if persisted in, defeat the Bill; and what is more, it will not redound to the credit of Scotland. Such assertion of little local interests, in matters of imperial moment, will lead to a suspicion that the Scotch bodies are afraid of schemes that imply effective supervision and uniformity. There is one thing in these amendments by the Duke of RICHMOND and GORDON which gives us satisfaction—they are so disappointing, they give such a striking illustration of the way in which the corporations and corporation interests clog this whole question, that we shall expect them to give a great impetus to the growing demand for a Board of Examiners entirely independent of corporations and their pecuniary interests. The noble Duke cannot be unacquainted with the history of medical examining corporations. He must know that the Scotch corporations are in no respect more to be trusted with a State examining system than others. We venture to believe that he will not press his own amendments, and we look to

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the profession, in the interest of the public, to give them a hearty opposition.

WHEN small-pox, with its hideous deforming characteristics, prevailed in this country, even the mitigated evil of "Inoculation" was regarded as a merciful boon to humanity. When so simple a preventive as Vaccination was proved to be effectual, the gratitude of all sensible people knew no bounds. Now that the prophylactic has in a very large measure fulfilled the predictions of its originator, and placed the malady which was once a dreaded scourge under the control of public authority, those who have so largely benefited by the process begin to question its utility, to resent its enforcement, and to challenge the method in which it is performed. There is nothing remarkable or which should not have been foreseen in this experience. The present generation has happily no more personal acquaintance with the passing scourge and the enduring penalty of a visitation of virulent small-pox than with the horrors of an outbreak of the plague in a densely-crowded district. If some personal sacrifice, however comparatively insignificant, were exacted from the population individually, to prevent a recurrence of the calamities of 1665, there would doubtless be an outcry against the enormity of the imposition. It is at once the weakness and the privilege of prosperous communities to forget the causes of their success, and more particularly any measure by which they may have been rescued from adversity. It is no marvel, therefore, that, even before vaccination has completed its beneficent task, there should be an organised attempt to rid the population of the incubus; and, of course, such an enterprise being in hand, the public mind must expect to be periodically disturbed by exaggerated and distorted representations of the evils alleged to be contingent on the use of this remedy. The vast deliverance which has been accomplished by this agency can no longer be measured by a present standard, and the boon itself is discounted and criticised with the freedom of ignorance and prejudice combined.

We think the time has come to grapple with this lack of knowledge and obstinacy at close quarters. It is inconceivable that public opinion should ever consent to the formal abandonment of the safeguard, but there is an undoubted, though inexplicable, tendency on the part of even logical, and, in other regards, strong and clear, thinkers to waive the one essential condition of success, in excluding the disease, while professing to carry out the only process by which it can be excluded. What, for example, is the proposal to relax the cumulative penal consequences of refusal on the part of parents to have their children vaccinated but a virtual stultification of the measure of public prudence? We do not make vaccination compulsory for the sake of the individual only, but of society. If a certain small section of the community are to be permitted to go unprotected, what is that but a perpetuation of the disease we are striving to extinguish? "What," say the anti-vaccinationists, "have you to fear if those who believe in vaccination are protected?" The answer is very obvious; the perpetual presence in our midst of a loathsome and virulent pest, ever ready to find out the weak points in our armour, and—which is of overwhelming concern to us as a people—a ceaseless cause of anxiety and source of peril to the infant population from the first moment of life to the age at which protection is possible. This immense injury inflicted on the community by allowing a few peculiar people to defy the law of public prudence is unaccountably overlooked by men like Mr. GLADSTONE and Mr. BRIGHT, who, to protect the liberty of the individual, would imperil society in one of its fundamental strata. There is no shadow of reason for inflicting a penalty for non-vaccination except to enforce the carrying out of the process. If, after one or two offences have been taxed, the law-breaker is to be left to his own devices, the legal procedure becomes a farce. Better let the parent or guardian who declines to have his child vaccinated at once compound for an indulgence to commit infanticide, not perhaps in the case of his own offspring, but in that of others, by preventing the extinction of the disease.

The objections urged by the "anti-vaccinationists" against the process are, as we understand the case, principally three: (1) the protection is not universally absolute for those who are vaccinated; (2) perils to health and even life attend the introduction of vaccine matter into the organism; (3) the operation cannot be, or is not, so performed as to ensure success in the purpose for which it is adopted, or immunity from contingent evils with which it may, by accident or negligence, be associated. In respect to the first of these propositions, our opponents point triumphantly to the considerable number of deaths from small-pox which are alleged to occur in cases where the patient has been "vaccinated." This raises a question which certainly needs an exhaustive answer. It is to be regretted that the Registrar-General has undertaken to distinguish between the "vaccinated" and "unvaccinated," without making it clear to the public mind what precisely the classification may imply. Does "vaccinated" stand for "*said* or *supposed* to have been vaccinated"? because if it be so, the term is certainly misleading. What sort of evidence is accepted as proof that the operation has been effectively performed? We only know one—namely, the actual presence of an unmistakable cicatrix left by the healing of the pock vesicle. There is, in fact, no other, and this is an unimpeachable proof of vaccination. The operation may have been performed, but unless the characteristic mark exists the subject has *not*, in any real sense, been vaccinated. Instead, therefore, of distinguishing these cases as "vaccinated," which may mean anything or nothing, the form adopted should have been "bearing vaccination marks." Meanwhile, much more than this would be necessary to give the return any value in statistics. It is indispensable to know the *age* of the deceased. Vaccination performed in infancy leaves a mark which endures through life, but the protective effects of the process do not last beyond the age of puberty. It follows that if the patient dying of small-pox is adolescent, or of mature age, and has not been re-vaccinated, the occurrence of the disease has no sort of bearing on the protective efficacy of vaccination; and to class such a death as occurring in a person who has been "vaccinated" is simply to falsify facts, and lead the public mind to an erroneous conclusion. It is one of the too numerous instances of the misuse of figures, which mar the progress of statistical science in its relations to the mortality arising from disease under diverse forms of treatment. The practical questions involved are of so great interest and moment

that this matter alone, in our judgment, calls for an exhaustive inquiry.

The second and third objections urged against vaccination must be taken together. No sensible person will deny that the operation *may* be so performed as to give cause for anxiety, if not to create danger. We believe the public mind has been abused by the stories of carelessness and mismanagement which have been told by those who seek to discredit the prophylactic. Nevertheless, however it has been created, the feeling of distrust awakened ought to be allayed. There are points of infinite concern which should be cleared up. Questions repeatedly asked demand a full answer. "Is there a danger of transmitting diseases, in addition to *vaccinia*, when inoculating one child with the lymph taken from another?" "If this peril exists, can it be avoided, and how?" "Is the manner in which the operation is generally performed satisfactory?" "Are all due precautions taken to prevent misadventure of any kind?" The importance of these interrogatories, and many of subsidiary interest, when suggested by parental anxiety, cannot be disregarded. We fear the perfunctory and contradictory fashion in which they have been too often answered by practitioners has done something to discredit the remedy. In any case it is incumbent on those who recognise the value of vaccination—as a public safeguard, and the keystone of our system of preventive medicine—to see that an effort is promptly made to meet the objections urged against it, which, if they have no more disastrous effect, obviously tend to convert a measure which ought to be hailed as a boon to the population into a sacrifice of personal feeling needing to be enforced.

A Royal Commission, composed of trusted authorities on matters of vital interest, would do more than any other agency to reassure the public mind, remove groundless objections, and facilitate the progress of a measure which is essentially and, we believe, purely beneficial. The time has arrived when a thoroughly exhaustive inquiry into the nature and effects of vaccination in its statistical and practical aspects would be advantageous, and we feel bound to urge that a Royal Commission should examine and report. The issues to be settled do not relate to the specific value of the preventive, but to the method of its employment, the best manner of collecting and recording results, and the public value of the facts at present classed as *statistics*. The whole subject of *re*vaccination—its necessity and effective performance—needs investigation, or, at least, to be so set before the public that it may be thoroughly understood. Upon some features of the requirement that adults should be *re*-vaccinated the strongest misconception prevails, and this is one of those subjects in regard to which there is much to gain and nothing to lose by the most complete publicity. It is not too late in the session to appoint a Commission such as we suggest, and we venture to hope the suggestion may be adopted. Many of our readers, among the number the best informed, will probably judge the inquiry unnecessary; but it should not be forgotten that, in the presence of recent and expected epidemics of small-pox prevailing among the unvaccinated, and numbering among its victims no small percentage of persons who are returned—we believe quite erroneously—as "vaccinated," there undoubtedly exists material which opponents of the system do not scruple to employ for their own purposes, and by which public opinion is in danger of being misled. Under all the circumstances, we think a Royal Commission appointed by the Crown, and independent of any department of the Government, is expedient; and we have no hesitation in urging that the appointment should not be delayed. Those who may at the moment question the need of such an inquiry will, we are convinced, hereafter see cause to congratulate themselves and the public that it has been held.

Is there any organ or tissue of the body which is not occasionally the seat of the formation of tubercles? It is doubtful whether the careful investigation of the present generation of workers will long permit an affirmative answer to this question. The occurrence of tubercles has now been noted in structures in which it was thought, not long ago, that they were never found, and it seems probable that soon their occasional occurrence will be traced in every part. We lately noted some interesting observations of the occurrence of distinct tubercular formations in voluntary muscles, and now we have to call attention to recent facts which demonstrate that tubercular ulceration of the tongue is met with, rarely it is true, but with a distinctness which suggests that when its occurrence is generally known its rarity may be found to be less than is commonly supposed. The condition is not in itself surprising when we reflect how constantly tubercular formations are met with in other parts of the alimentary tract.

The condition was noted long ago by PORTAL, but has been until lately so completely overlooked that it is unmentioned in many of our systematic treatises. It is to the French that we are indebted for the observation of most of the cases, of which several have been recorded by TRÉLAT, FÉRÉOL, LAVERAN, and others, and a well-marked example has just been published in *l'Union Médicale* by M. MILLARD. The characters of the affection are almost distinctive, apart from its association with pulmonary disease, which is commonly obtrusive. The patients are usually of early or late adult age. The ulcer is commonly single, but two or three may be present, and in some cases there have been a large number of excavations; in that of M. MILLARD it was estimated that there were a hundred separate ulcers. Their seat is the anterior part of the tongue, the edges, and the under-surface; the upper surface being very rarely invaded. The common seat of the ulcers suggests that the occurrence of the tubercular deposit may have been determined by the local irritation of decayed teeth, just as local irritation elsewhere has a distinct influence in determining the change. The affection commences by the appearance of a minute white spot on the surface of the tongue, over which the mucous membrane gives way, allowing the escape of a little puriform material, and thus an excavation is formed, minute at first, but rapidly increasing in size. Similar spots make their appearance around the first, and confer upon the disease its most characteristic aspect. The ulcers thus formed may remain discrete, or may coalesce. When the large ulcers have been formed, they are irregular in shape, have a yellowish, uneven base, beneath which the tissue is indurated. There is no actual tumour, although the characters of one may, as MILLARD remarks, be closely simulated by the muscular contraction which occurs as the consequence of the pain of the ulcers, to prevent the extension

of that portion of the tongue. For these ulcers are commonly painful, often extremely so, rarely painless. They are occasionally associated with the development of similar ulcers elsewhere in the buccal cavity, especially, in several cases, in the soft palate. In one instance, recorded by GELADE, the ulcers extended from the palate to the gums of the molar teeth, and invaded the superior maxillary bone, which became excavated by a sort of soft caries.

The tubercular nature of these ulcers rests upon strong evidence. They are almost invariably associated with signs of pulmonary phthisis, frequently with actual excavation of the lung. They are unlike other ulcers, whether simple, specific, or epitheliomatous, and, in several cases in which it has been tried, anti-syphilitic treatment, iodide of potassium or mercurial inunction, has been useless, and in no case has any history of syphilis, direct or indirect, been traceable. But their nature does not rest upon the evidence of clinical association alone. The tubercular nature of the white points from which they take origin has been demonstrated by RAYNAUD, KOERTE, and NEDOPIL. On microscopical examination they were found to be of similar structure to the miliary tubercles which existed elsewhere in the cases. The ulceration is the result of a rapid caseation of the tubercles which infiltrate the tissue beneath the ulcer. Although the signs of advanced phthisis have usually coexisted with such ulceration, the latter has been noticed to initiate the affection, as in a case recorded by LAILLER, in which general miliary tuberculosis of the mouth was followed by rapid phthisis, and in the case in which the nature of the disease was demonstrated by KOERTE. The patient of the latter was a man, aged fifty-three, previously healthy, and the affection of the tongue preceded for two months the occurrence of infiltration of the apices of the lungs.

Although the ulcers have not in any case been the immediate cause of death, they have in many instances assisted in bringing about a fatal termination by interfering with mastication and with the ingestion of food. Their treatment is thus a matter of considerable importance. In obstinacy they resemble closely the tubercular ulcerations upon other mucous membranes, and several observers have come to the conclusion that little or nothing can be done; but BUCQUOY and LABOULBÈNE have recorded cases treated successfully. Relief may be given to the pain by sedatives, especially by morphia and glycerine; by a spray of iodoform dissolved in ether, as suggested by LAILLER; and by antiseptic applications, such as borax and hyposulphite of soda. It is evident that little benefit can be expected from the application of caustics, since the affection is deeply seated; the tubercular process underlies the ulcer, and cannot be influenced by astringents or caustics applied to the surface. Nitrate of silver and chromic acid have both failed. The most efficient remedy is excision. This has been performed in several cases under the impression that the disease was really epithelioma, and in others in order to get rid of ulcers which were very troublesome and interfered seriously with nutrition. In all cases the wounds have healed well, and the removal of the indurated tissue underlying the ulcer has arrested the disease.

ABOUT a year ago the Thames Conservators, having grounds for suspecting that the discharge of sewage at Barking and Crossness was injuring the flow of the river as well as polluting its water, requested Captain CALVER to investigate the subject. He did so, and in October presented a report upon which we commented shortly afterwards. The most important of the conclusions at which he arrived was that certain accumulations of mud which had recently formed above the sewage outfalls were derived from the sewage discharge, the quantity of suspended matter in the flood-stream being greater than that in the ebb.

It was not to be expected that this conclusion, involving so grave a condemnation of the present sewage system of London, would be allowed to pass unnoticed by the Metropolitan Board of Works. Shortly after the appearance of Captain CALVER'S report the Board requested their chemist, Mr. KEATES (with whom was afterwards associated Dr. DUPRÉ, F.R.S., the chemist to the Medical Department of the Local Government Board) to undertake a new series of observations and experiments. The report of those gentlemen, dated April 12th, is now before us, and requires very careful consideration.

The first point to be ascertained was obviously the quantity of suspended matter in the sewage which entered the river. Samples of sewage from Crossness and Barking were collected twice a day for about ten days in January. The suspended matter in these samples was found to vary from 8 to 46 grains per gallon, with an average of 23·06 grains. Of this suspended matter, the organic portion—estimated, we presume, by incineration—varied from 4 to 37 grains per gallon, the average being 14·88 grains. From these figures the reporters calculate that the maximum quantity of solid matter thrown into the Thames by the two great outfalls is 65,000 tons per annum.

This estimate is a very low one, and, although the well-known skill of the reporters forbids us to doubt of the accuracy of their analyses, we must confess to considerable distrust of the estimate based upon them; for the quantity of suspended matter in sewage is subject, as everyone knows, to extreme fluctuations—storms, in particular, increasing it to an enormous extent. Now in the report before us nothing is said of the weather during which the samples were collected. If it was fine during the week or so of collection, or even only moderately wet, the average found from the experiments could not be a fair one, for it is probable that the solid matter carried down by a single heavy flood is equal to that of weeks of ordinary flow. It must, moreover, be remembered that the results of Professor WILLIAMSON'S analyses of the Barking sewage, made as recently as September last at the instance of the Thames Conservators, are strikingly unlike those of the present reporters. He found in two samples of the sewage collected *in dry weather* 108·01 grains and 151·45 grains per gallon respectively of solid matter in suspension, of which 37·24 grains in the first case and 104·97 grains in the second consisted of organic matter. The truth is that far more extensive observations are required for the accurate determination of this very important point.

The next point investigated was the composition of Thames mud, as bearing on the question of the alleged offensive character of the recent deposits. The reporters analysed samples collected in all parts of the river, from

Twickenham to the Medway, with results which are highly valuable and interesting. They found, as might have been expected, considerable variations of composition, the organic and volatile portion ranging between six and twelve grains per cent. of the dry substance, but the final conclusion which they reached was that no characteristic difference could be found in the mud deposited in different parts of the river. This conclusion is so important that it is best given in the words of the report:—"Neither chemistry nor the microscope has established, at least in our hands, any specific character sufficing to prove that mud from one part of the Thames differs generically from that taken from another part."

The figures given certainly seem to support this remarkable conclusion, and the reporters point to the lightness of the suspended matter of sewage (the specific gravity is said to be only about 1·5) as explaining it. It is, however, so entirely in opposition to some well-known facts, as well as to general probabilities, that we can only accept it with reserve. It must be remembered that in no part of the river has the mud a very satisfactory past history. It ought to be less offensive in the lower than in the upper reaches, and this is certainly not the case.

The report concludes with a very extensive series of estimations and analyses of the suspended matter in Thames water from Teddington to Yantlet Creek at various depths and at various states of the tide. All the samples were collected on the same day, January 15th. Here again nothing is said of the general condition of the river on the day in question, and the figures, interesting as they still are, lose thereby some portion of their value.

We should not feel disposed, even if space permitted, to discuss at the present moment the wider question of which the present is but an offshoot. That the condition of the Thames, from the source to the sea, is unsatisfactory, few will deny; that many of the worst evils from which the stream suffers are remediable is almost self-evident. But in so vast a national interest every step must be most anxiously weighed, and we hope we may be able before long to contribute some practical suggestions towards the solution of the problem.

Annotations.

"Ne quid nimis."

THE COLLEGE ELECTIONS.

WITHIN a few days the vacancies in the Council of the Royal College of Surgeons will be advertised in accordance with the terms of the Charter. We would call attention to Section 10:—"That no Fellow shall have power to nominate at any one election any greater number of persons as candidates for the Council than the number of vacancies which shall be to be filled up at such election; and if any Fellow shall at any such election nominate any greater number of candidates than as last aforesaid, then such Fellow shall be incapacitated from voting at that election." As there will be only three vacancies, no Fellow can nominate more than three persons.

THE CHANTRELLE TRIAL.

THE trial of Eugene Chantrelle, a professor of foreign languages, before the High Court of Justiciary at Edinburgh, for the murder of his wife by poisoning, presents many points of interest. It seems that Chantrelle and his wife were not on the best of terms; that he had on more than one occasion beaten her and threatened her, and that he was in the habit of using abusive language towards her. He had, moreover, insured her life for £1000 in an accident insurance office, the sum to be paid only in case of death.

On New Year's day the servant of the Chantrelles was out pleasuring, and on returning home in the evening she found her mistress ill, "looking heavy," and in bed. The next morning Madame Chantrelle was worse. She was moaning, and had vomited. The prisoner was called to his wife, and when next the servant went into the deceased's room she smelt gas, which she had not previously done. The gas-pipe in the room was found to have been wrenched off. Madame Chantrelle was removed to the Royal Infirmary, where she died on the afternoon of January 2nd.

All the medical men who saw the deceased during life were agreed in saying that she presented the symptoms of narcotic poisoning, but the post-mortem examination of the body and the analysis of its contents gave results which were absolutely negative. The body was healthy, but there was no narcotic or other poison to be detected. A stain of extract of opium was found on the sheet, and the prisoner was proved to have purchased a quantity of extract of opium in the previous November. There was no sufficient evidence to show how the poison had been administered, the theory of the prosecution being that the prisoner had given it on pieces of orange, which his wife had sucked.

The defence was that Madame Chantrelle had died, not from the effects of opium, but from the inhalation of coal gas. There was, however, considerable evidence to prove that the symptoms had manifested themselves long before the breaking of the gas-pipe, and since this accident was not satisfactorily accounted for, it appears to have been regarded by the jury as evidence of the prisoner's guilt. Although the evidence against the prisoner could hardly be regarded as absolutely conclusive, the jury arrived without much difficulty at a unanimous verdict of "Guilty," and Chantrelle was sentenced to be hanged on the 31st of the present month. We trust that some efforts will be made to provide for the unfortunate children, who will have been deprived of both their parents, the one by murder, and the other by the retributive justice of the law.

LORD CARNARVON AT KING'S COLLEGE.

THE annual distribution of prizes to the students in the medical department of King's College took place on the 22nd inst. The Chairman, Lord Carnarvon, after presenting the prizes and certificates, delivered a most interesting and instructive address, in which he pointed out that from many causes he was peculiarly interested in the medical profession. He had read Sir James Paget's oft-quoted paper in the St. Bartholomew's Hospital Reports, and had come to the conclusion that the percentage of failures in our profession was certainly not greater than in the other skilled professions, and that the opportunities and advantages for successful students were greater than in most others. The question which he should like to have answered was, "What proportion of prizemen and scholars, relatively to the ordinary mass of students, arrive at distinction in after-life?" For a reply to this query there were no data, and he proceeded to enforce on those present that, in medicine particularly, education was a life-long process, and that successful students at college must engraft sympathy, tact, &c., on their mere book-learning, in order to become successful practitioners. Speaking as an ex-Colonial Secretary, he could assure young medical men that, although life was rough, and there were many disadvantages to be overcome, yet a large and lucrative field of labour for them existed in the colonies, provided

that they took into consideration its *pros* and *cons* before they made a final decision in regard to their future career. He then adverted to the special advantages of a college as a training institution for young men, inasmuch as their knowledge and sympathies were widened by contact with those engaged in other pursuits, and concluded by wishing every success to those who had received prizes and to those who had been unsuccessful, quoting Sir Benjamin Brodie's well-known remark as to his feeling of how ignorant he must have been at the commencement of his medical life. The following scholars were presented to his Lordship:—V. Matthews (senior), F. H. Norvill (second year), C. W. Cunnington, G. W. Parker, S. Farmer (junior), R. C. S. Sweeting, S. E. Craddock, J. W. G. Kealy, St. Clair Thomson (Warneford), E. M. Crookshank (Science).

THE DEBATE ON THE CONTAGIOUS DISEASES ACTS.

THE report of the Assistant Commissioner of Police, to which we referred on the 4th inst., and the testimony of Mr. Tremayne, the member for East Cornwall, as well as of the influential inhabitants of the towns in which the Acts are in force, must have convinced the advocates for their repeal that they had a very unequal battle to fight on Wednesday last. The hon. member for Clonmel called attention to the presence of strangers, and afterwards asked whether it was competent to move that the ladies' gallery be cleared; and although the latter motion was contrary to one of the regulations of the House, and could not be enforced, yet we are sure that most people with any feelings of delicacy will sympathise with the attempt of Mr. Moore to ensure discussion of this subject in the presence of members only. The statement in 1876 of the late Mr. Ward Hunt, as First Lord of the Admiralty, in favour of the Acts, was supplemented by the opinion of Mr. Smith, the present First Lord, who said that he had studied their workings in his official capacity, and felt bound to declare that "their operation was beneficial to public morality, to the persons concerned, and to the State." The advocates for their repeal are therefore met on every issue which they have raised, except on the point that they violate the first principles of English constitutional liberty. This phrase is common to the supporters of every means which will spread disease broadcast amongst our population, but we can hardly suppose that they would expect any legislative body to totally ignore the disastrous effects of lute freedom. The Factories Acts, the Compulsory Vaccination Act, and other public provisions interfere with the freedom of the subject, and are opposed by many on this ground only. Restrictions of individual liberty are justifiable when, in the words of Mr. W. H. Smith, they are beneficial to the persons concerned and to the State. If, in addition, they are of advantage to public morality, no valid reason can be urged against their existence. We are quite sure that no unprejudiced person can study the statistics which were presented to the House of Commons in the recent return of the Assistant Commissioner of Police without coming to the conclusion that all these objects have been attained by the Acts in question. Reclamation of 134 women who had begun a life of prostitution; restoration of 626 to their friends; the entering into homes of 241; the rescue of 183 who had been found in bad company and in improper places, afford surely a sufficient result to arrest the attention of every legislator and philanthropist. It is urged by the advocates for repeal that reformatory work is not the duty of the officers who are appointed to carry out the Acts, but every well-wisher to the community and to the unfortunate women themselves must be struck with the fact that no voluntary agency has been of anything like a similar value in this direction. The argument that a very formidable contagious disease (presumably syphilis) is intensified by the operation of the Acts is almost too absurd to require comment. The letter of the lady superintendent of the Lock Hospital at Chatham, in our last issue, shows plainly how the disease is kept up by women coming from unprotected places, and the return points out that more than 60 per cent. of such women were found to be diseased on their first medical examination. It is consequently urged by this lady that the Acts might be extended with advantage to the towns and villages which adjoin the protected districts, and the statistics of Captain Harris give very great support to these views.

THE MEDICAL ASPECTS OF THE KAFIR WAR.

THE last news from Kafirland was not by any means exhilarating. Fresh rebellions have occurred, many of the colonial levies, having completed their terms of service, are returning home, and their places are not filled up. King William's Town, the head-quarters of the staff, has been fearfully overcrowded for months, and in consequence of an intensely dry season, the stream that flows through the town is dried up, and is a depôt for *débris* of vegetables, &c., and all sorts of other unwholesome material. It cannot, therefore, be wondered at that typhoid (and, it is reported, typhus) is prevalent, that the Grey Hospital is crowded, and that the mortality is very great indeed. Sanitary matters, as in Cape Town, are here in the hands of the municipality, and so, of course, little or nothing is done, and the scarcity of water adds fearfully to the intensity of the evil. Rather less than three months ago, the Colonial Secretary, Mr. Sprigg, some few days after his accession to office, appointed Dr. Hartley as Principal Medical Officer to the Colonial Forces. No better appointment could have been made, as the officer chosen is not only a good man as to general professional acquirements, but has had several years' experience in the country, having practised as a district surgeon in Basutoland with great success. This appointment has been supplemented by an order from the Colonial Office, offering temporary surgeoncies to civilians, to which we have referred in another article.

EXPERIMENTS IN VENTILATION AT WESTMINSTER.

SINCE the outcry against the ventilation of the Law Courts, an experiment has been made at Westminster which, we fear, has given anything but favourable results. In the Lords Justices' Court the vertical system of ventilation has been introduced. The consequence is self-evident, as a visit to the Court in question will at once demonstrate. The foulness and closeness of the atmosphere will convince anyone that the system, as applied in this instance, is a failure. The air of the Court was much purer before the alteration in question, and a careful examination of the present method has fully convinced us that this could not be otherwise. Five apertures have been made in the wall of the Court on a level with the floor, and give into a little yard. Five corresponding tubes, varying from three to four feet in height, ascend the side of the wall, and throw the air upwards towards the ceiling of the Court, where it is supposed to diffuse itself, and fall gradually on the audience, without, of course, any possibility of a draught arising. To ensure this end, every aperture—that is, windows and doors and the ancient ventilators—must be closed. We are told to trust solely to the ventilating tubes. To enable us to investigate the matter, these injunctions were strictly carried out. The temperature of the Court, which naturally was not sitting when we took our measurements, was shown to be at 64° Fahr.; that of the yard, whence the air-supply is derived, was only 60°. This difference was enough to ensure a current of air. The communication with the five tubes was then opened, and we proceeded to measure with an air-metre the velocity of the

current of fresh air coming up each tube. This varied from 41 ft. per minute in one tube to 68 ft. in another, the average of the five tubes being 60 ft. per minute. But the dimensions of these tubes are very small, amounting, in all, to 95 square inches, or two-thirds of a foot. At that moment, therefore, the ventilators only admitted 40 cubic feet of fresh air per minute, or 240 cubic feet per hour—that is to say, about enough air for two persons! But the Court can seat a hundred persons, and there is standing room for a hundred and sixty to two hundred more; and we should add that this Court is often crowded to the uttermost. The Court, it must be remarked, is large, measuring about 12,000 cubic feet. Further, in measuring the incoming air, our calculations can only be considered of approximate value. Innumerable circumstances may increase the velocity with which the pure air travels into the Court, and the supply would certainly be much greater when attracted by the heat of a crowd or by the accidental opening of doors, and if some other means were provided for the more ready exit of the foul air. But, even admitting that our experiments were made at a very unfavourable moment, admitting also that errors may have been committed in measuring so intangible a substance as air, granting that at times the supply of fresh air may be twofold, threefold, or even twenty-fold greater than we found it to be, this would only prove that the method of ventilation in question supplies air for four or six or even forty adults, in a room where there is an audience numbering from 200 to 300 persons. This system of vertical ventilation may be of service in a room containing a few persons, but it is altogether insufficient for a crowded court. At least artificial means should be employed to draw the air in and out of the Court. The system will not work of itself with sufficient rapidity. As it is, its application has been practically abandoned. During the sitting of the Court, doors and windows are thrown open, and until something more efficacious is discovered, we should recommend an early return to the old system, which at least could boast of an intake of fresh air measuring nine square feet, and of a large ventilating shaft to convey the exhausted air away to the roof of St. Stephen's.

THE "USES" OF PAIN.

THE question is often asked, "What is the use of pain? It is scarcely conceivable that the infliction has no object." There are obviously two aspects of this question: in one Science has an immediate interest; with the other it has a secondary, but not unimportant, concern. The first is essentially physical. What useful purpose does pain subserve in the animal economy? The answer is thrust upon us by daily observation and experience. There are two sentinels posted, so to say, about the organism to protect it alike from the assaults of enemies without, and exacting friends within. The first of these guardians is the sense of *fatigue*. When this speaks there is need of rest for repair. If the monitor be unheeded, exhaustion may supervene; or, before that point of injury is reached, the second guardian will perhaps interpose for the vital protection—namely, *pain*. The sense of pain, however, is more directly significant of injury to structure, active or threatened, than an excessive strain on function, although in the case of the vital organs pain occurs whenever the pressure is great. Speaking generally, it may be set down as an axiom that, whatever collateral uses pain may subserve, its chief and most obvious service to humanity is as a deterrent and warning sensation to ward off danger. It is worthy of note, though sufficiently familiar to medical observers, that the absence of this subjective symptom in cases of severe injury is too often indicative of an injury beyond repair. The extinction of pain is not the highest, although it may be a generous impulse. If there were no guardian sensibility of this nature, it would be impossible to live long in the world without self-inflicting the most formidable injuries. That pain, in the second place, has an educational value, as regards the mind and temper, no one can doubt. Some forms of pain would seem to be chiefly intended for this purpose; but even in this view pain has a practical interest, because the higher development of the mind which controls the body, and of which the brain is the formative organ, is a process of physico-mental interest governed by natural laws of which Science is perfectly competent to take cognisance. The subject as a whole is one with which the physician and physiologist have much concern.

THE CARE OF CHILDREN BY "SECULARISTS."

IT is impossible not to feel that a recent decision of the Master of the Rolls, by which the care of a young girl was withdrawn from a "secularist," has the full justification of public prudence and moral propriety. The human character is incomplete without a due development of the moral instinct, and this can only be secured by religious teaching. It is not so much a question of the form that teaching ought to take, as the fact that the religious principle, which undoubtedly forms an integral part of the human mind, as normally constituted, is recognised. Atheism is not alone to be considered as unbelief or infidelity, it is an abnormal *state*. There must be something at fault in the mental organism which can recognise no moral influences beyond those of its own creation. The mind that has become so absorbed with its own inner experience, and grown so exclusive and dogmatic as to deny the existence of anything and everything it does not immediately perceive, is essentially unfit to act as a trainer of other minds. It is, indeed, an open question whether an intellectual development so stunted as the simply "secularist's" is fit to be trusted with its own control. The recognition a purely materialistic philosophy and a secular "religion" had received in unexpected quarters during the last third of a century, happily gives some tokens of being on the wane. It would be interesting, if it were possible, to ascertain precisely what share false methods of thought, depriving the mind of its greatest and, in some extremities, *only* resource—hope outside human nature—may have had in producing the state and deeds that lead to men and women being locked up in lunatic asylums! It is the fashion to ascribe a very large proportion of the insanity of the day to drink; perhaps, if the facts were more closely investigated, a still greater percentage of cases might be traced to the utterly spiritless and helpless condition that results from the creation of a great black wall round the field of vision where Nature has left a cloudless horizon, which religion scans with hope. If young minds are left to be trained by those who have extinguished, or are devoid of, the religious instinct, the blind will lead the blind, and society will reap the penalty in some of the divers forms of avoidable evil it has at present equal cause to regret and resent.

DIPHTHERIA IN PARIS.

IN his quarterly report on the health of Paris, M. Ernest Besnier gives some interesting particulars concerning the prevalence of diphtheria. The disease presents an annual maximum in the first three months of each year, lessening gradually during the summer months to increase gradually during the last quarter. This annual recrudescence was well marked this year. During the last few years the disease has manifested a steady permanent increase. The mortality now is three times that which obtained ten years ago, and double that of only five years ago—not in consequence of any accidental outbreak, but of a uniform increase in prevalence year by year. In 1877 no less than 2393 deaths were ascribed

to diphtheria, although in the same year, in London, with a million and a half more inhabitants than Paris, it caused only 492 deaths. In the same year, in Berlin, with only a million inhabitants, the deaths from this disease were 932, and in Glasgow, with only 560,000, the deaths were 366.

It is well known how little care is taken in the Paris hospitals to isolate cases of infectious disease. The administration has just decided to adopt the measures of reform long urged upon it. The only disease at present isolated is small-pox, and the arrangements for this are scarcely competent to meet the requirements of an epidemic. As regards diphtheria, measles, scarlatina, and whooping-cough, there is no isolation. In one hospital, Ste. Eugénie, an attempt has been made to isolate the cases of diphtheria, but only by placing them in a room separated from the general ward by a narrow passage, while they are attended by the same nurses as the patients in the general ward. Five cases of diphtheria developed during the three months in the general ward. Out of 36 cases observed there by M. Bergeron, 9 were faucial, 25 laryngeal, and 2 conjunctival. In 22 of the laryngeal cases tracheotomy was necessary, and only one recovered; of the 21 fatal cases, 3 died on the day of the operation, 5 the following day, 3 two days afterwards, 4 three days, 3 four days, 2 five days, and 1 five weeks after the operation, the last in consequence of paralysis. In one-half of the cases of tracheotomy the operation was done on the day of admission. At the Hôpital des Enfants, of twenty-five cases of tracheotomy only two recovered.

THE REGULATION OF THE MILK-SUPPLY.

PUBLIC opinion would appear to be maturing more rapidly in Scotland than in England as to the necessity of some legislative control over the milk-supply, in view of the frequently recurring outbreaks of typhoid fever through the agency of milk. A recent serious outbreak of typhoid in the West-end of Glasgow, traced with unerring certainty by Dr. Russell, the medical officer of health of the city, to the propagation of the typhoid poison by means of a particular milk-supply, has given occasion to the inhabitants to take special action on the subject. A meeting was convened, the Lord-Provost in the chair, and a committee was appointed to "impress upon the authorities the necessity for providing a general measure of legislation with regard to the regulation of the milk-supply." This committee consisted of Professor T. McCall Anderson, Mr. Sheriff Spens, Professor James McCall, Mr. Robb Miller, and Mr. Robt. H. Leadbetter. The committee has prepared certain suggestions for an Act of Parliament for the sanitary regulation of places of milk-supply to towns. Although the suggestions apply to Scotland, in principle they are of general application in the United Kingdom, and should receive the most serious consideration with a view of combined action when a favourable opportunity arises for bringing the subject before Parliament. The suggestions, as drafted in the form of a Bill, provide for the registration and licensing of places of milk-supply, and of persons engaged as intermediate agents in the milk traffic; for the medical officer of health, or a medical man appointed for the duty, being the registering agent, and the Bill would give to this officer the power of prohibiting the sale of milk from unregistered places. It further provides for the inspection, by the medical officer, of places of milk-supply before registration, for the inspection of all registered places at intervals, and for the preparation of regulations and bye-laws as to such places; also for information being given to the medical officer of the appearance of any contagious or infectious disease in the household of a registered or licensed person, and for the suspension of his traffic until he has received instructions from the medical officer as to necessary precautions. Medical men, moreover, are required to give information as to the occurrence of contagious or infectious sickness coming under their observation in places of milk-supply, a half-guinea fee to be paid by the local authority for such information. Persons convalescent from a contagious or infectious disease are prohibited from taking any part in the business of milk-supply until it be certified that they may safely do so by a medical man. All these provisions are guarded by penalties, while special provisions guard the registered or licensed milk-supplier from a vexatious application of the proposed law, and make needful arrangements for proper compensation for loss. The suggestions have been prepared with the most thoughtful care, and they must greatly facilitate future dealing with the subject in its legislative aspects.

THE MICROPHONE IN DIAGNOSIS.

DR. RICHARDSON has been experimenting during the last week with Professor Hughes, the distinguished discoverer of the microphone, or sound magnifier, in order to ascertain whether the apparatus can be applied to diagnostic purposes in auscultation of the lungs and heart. It has been assumed that an instrument which makes the steps of a fly audible at a long distance can at once render any movement in the human body acutely perceptible through the sense of hearing. This is, however, a premature assumption. By means of the microphone Dr. Richardson has been able to detect the respiratory murmur and the sounds of the heart, but not practically better, up to this time, than with the stethoscope simply. The fact is that there is considerable difficulty in making the sounds which are heard through the stethoscope pass in the form of electrical vibrations to the ear, and until this is achieved the application of the microphone for the purpose of diagnosis is not available. Further experiments are, however, in progress, and we shall hope soon to have to record that the present difficulties are overcome. To listen to a watch or a small clock through the microphone is to listen to every part, as it were, of the inanimate mechanism, so that the smallest defects are detectable; and if the same analysis of motion can be applied to the animal mechanism Laennec himself will find an historical rival in Professor Hughes.

THE UTILISATION OF SEWAGE.

MR. PEREGRINE BIRCH read before the Institution of Surveyors, on the 13th inst., a paper on "The Use of Sewage by Farmers," which embodied some facts that deserve to be noticed as bearing on a question we have repeatedly discussed. It appears that there are at the present time "upwards of one hundred owners and occupiers of land in Great Britain who use sewage for the sake alone of what they can get out of it by agricultural means." Of these "more than sixty are tenant farmers, who continue to use it although they have, annually at least, the option of ceasing to do so." It seems five out of six of the tenant farmers purchase the sewage they employ, so that their adhesion to the method proves conclusively that it *pays*.

Nearly four thousand acres of land are under regular cultivation with sewage. Mr. Birch is of opinion that "advocates of sewage precipitation processes should not regard sewage farmers as their rivals, for a chemical process might be very largely used with advantage when farmers are being persuaded or taught to use sewage. But this should be the distinct aim of all cultivation, for there is no chemical process that could not be worked to greater advantage during two months of the year than twelve, or applied to a small quantity of sewage at less cost than to a large." Our primary interest is to see the utilisation of sewage generally adopted; the method employed must be determined by experience on the grounds of cheapness and expediency.

ARMY MEDICAL OFFICERS.

IN reply to a question in the House, Colonel Stanley stated that a sum of £5000 had been taken in the Estimates for the employment of civil surgeons at the Cape, "as it was found a more economical and desirable arrangement than an augmentation to the staff, as the services of these gentlemen will be dispensed with when no longer required." We understand that under this arrangement seventeen civilians, all duly qualified, have been already sent out; that their pay is to be £1 per diem with the usual allowances; that they are to receive a gratuity of two months' pay when their services are no longer required; and that they have engaged to serve for twelve months unless the outbreak is put down before that time. We presume the present course has been adopted owing to the very unsettled state of matters, and the desirability of having the services of skilled army medical officers available at the shortest notice. Under ordinary circumstances there would have been no difficulty in supplying the force at the Cape with a sufficient number of army medical officers.

THE LONDON SMALL-POX EPIDEMIC.

THE fatal cases of small-pox in London, which during the four preceding weeks had declined from 80 to 48, were again 48 in the week ending 18th instant; 27 occurred at the different metropolitan small-pox hospitals, and 21 in private dwelling-houses. Eleven of the deceased small-pox patients had resided in Islington, 5 in Fulham, and 4 in St. Pancras. Twenty-five, or more than half the 48 fatal cases, were certified as unvaccinated, 11 as vaccinated, and 12 were "not stated" as to vaccination. Nearly all the "not stated" cases occurred in private practice; and it is noted that 12 of the 25 cases certified as unvaccinated were of children under five years of age. In the metropolitan asylum small-pox hospitals the number of patients under treatment further declined to 766 from 834 and 829 at the end of the two preceding weeks; no less than 170 new cases were, however, again admitted to these hospitals during the week.

In the outer ring of suburban districts five deaths from small-pox were registered, making 53 deaths in Greater London; whereas not a single fatal case was registered during the week in any of the nineteen large provincial towns.

SALT IN BEER.

THE presence of a small percentage of salt in malt liquors may be unobjectionable, or even necessary to bring out the flavour of the principal ingredients, but it is impossible to veil the fact that, whether a very saline water is selected for brewing purposes or salt be introduced in any considerable quantity during the manufacture of beer, the expedient is a device to create thirst and increase the demand for drink. It is, therefore, a matter of public interest to see that the adulteration of malt liquors with salt is prevented by the enforcement of the law. If the brewers take the hint given to them by Mr. Sclater-Booth on Friday week, and carry a representative case to the Court of Appeal, those who are anxious to minimise that excess in drinking, which constitutes a ceaseless cause of loss and injury to the working classes of this country, should see that the true nature of the adulteration is exposed. We can easily understand that beer containing an "insufficient" quantity of salt will not be profitable. It may well find its way back to the brewers, because, the thirst-producing element being absent, the publican would find the article lie on his hands. The mysteries of the trade in intoxicating beverages are many and bewildering, but we venture to hope the legislature and the public are too deeply impressed with the importance of encouraging temperance to be greatly moved by compassion for the hard case of the makers and sellers of beer which cannot be sold in quantities satisfactory to its producers unless they are allowed to drug it with enough salt to render their customers inordinately thirsty!

THE PUBLIC HEALTH ACT.

THE Great Western Railway Company prosecuted the warden and medical attendant of a school on the 13th inst. at Reading for sending a boy affected with scarlet fever on their line of railway from Reading to London. The case was dismissed by the magistrates because it was proved that no precise symptoms of scarlatina were manifest when the boy was sent away. Scarlet fever, however, had appeared in the school as early as the 6th of April, and on the 11th the school broke up for the Easter holidays. A circular note was sent to the parents and guardians "to warn them that scarlet fever had appeared in the school," but the warden confessed that no knowledge of the fact was given to the railway company. We do not care to state here on whom the actual responsibility rested, but it cannot be denied that this thoughtless sending off suspected, infected, and positively sick persons by railways or other public conveyances is a very common, though a most reprehensible, practice. We recommend other companies to follow the example of the Great Western, and prosecute with vigour anyone who is found to have infringed this very important section of the Public Health Act.

MR. GLADSTONE AT THE EAST LONDON CHILDREN'S HOSPITAL.

THE fourth annual meeting of the East London Hospital for Children was held in the grounds of the institution on Wednesday, the 22nd inst. The Right Hon. W. E. Gladstone presided, and in eloquent and able terms advocated the claims of the charity, concluding as follows:—"In the circumstances of which he had spoken they should render their sincere thanks to the laborious and devoted men of all professions who had helped to sustain an institution which had succoured hundreds and thousands of the children of those whom the residents of the West-end of London never saw, but who, by their daily labours, ministered to their necessities, their comforts, their enjoyments, and their luxuries. They might, if the facts of the case were brought home to them, hope that their hearts would be opened—and their purses also—and that they would administer of their abundance to the wants and distressing incidents which must accompany the various experiences of life in this abounding population."

DIPHTHERIA AT SOUTH HAMPSTEAD.

WE have received information of a somewhat serious outbreak of diphtheria at South Hampstead, in the Canfield-road, at the end of the Abbey-road, St. John's-wood. We hear of twenty-one cases, and there have been several deaths. In one house there are eight cases, in another five. These local outbreaks of diphtheria have great significance, and deserve the most searching investigation. The most favourably-situated localities are liable to them, if sanitary precautions are neglected. It would be satisfactory to know that this outbreak was receiving early attention from the local medical officer of health and from the Local Government Board.

UNIVERSITY COLLEGE.

ON Monday, the 20th, Mr. John Simon, C.B., distributed the prizes in the faculty of medicine at University College. The address delivered by Mr. Simon on the occasion was remarkable for its force and applicability. The annual dinner of the Hospital took place at Willis's Rooms on the

21st inst. Mr. Erichsen occupied the chair, and the company included, among other distinguished guests, Lord Napier of Magdala, and Sir Wm. Jenner.

SANITARY WORK IN THE CAUCASUS AND ARMENIA.

THE Russian authorities are initiating systematic proceedings for the sanitary amelioration of the towns at present occupied by the Russian forces in the Caucasus and Armenia, and the Government of the Caucasus has recently granted a supplementary credit of 200,000 roubles (150,000 roubles having, if we mistake not, been previously granted) for the work. Twelve sanitary detachments have been formed and detailed for service in the various towns—to wit, Kars, Hassan Kalé, Erzeroum (where the bodies of 16,000 persons dead of typhus lie imperfectly buried), Delijan, Alexandropol, Ardahan, Erwan, &c. The cost of cleansing Kars is estimated at 80,000 roubles.

DEATHS OF RUSSIAN MILITARY MEDICAL MEN FROM TYPHUS.

THE Warsaw *Medical Gazette* announces the deaths of seven other medical men from typhus among the Russian forces at the seats of war—three in the Caucasus and four in Bulgaria. The total number of Russian military medical men who have lost their lives from this disease from the beginning of the year to the close of April is 59, of whom 29 died in the Caucasus and 30 in Bulgaria.

IN addition to the candidates we mentioned last week for a seat on the Council of the Royal College of Surgeons in Ireland, we may add the names of Mr. John Madden, Deputy Surgeon-General; Mr. McDonnell, the outgoing President; Mr. Henry Gray Croly, late Examiner in the Surgical Court of the College; and Mr. J. Bellew Kelly. There will be twenty-four candidates for nineteen places. We may add that Mr. Richard G. H. Butcher will not seek re-election.

THE Cottage Hospital system has penetrated to the interior of South Africa. We have just received the annual report of the St. George's Cottage Hospital, established at Bloemfontein, the capital of the Orange Free State, under the auspices of Bishop Webb. A sum of nearly £360 has been expended and £429 received during the past year, which showed a large amount of good work performed. The hospital is excellently appointed, and is very popular in the city and district.

THIRTEEN LADIES have received the decoration of the Red Cross recently established by the Emperor of Russia in honour of services given to the sick and wounded of the Russian army. The Baroness Rahden received the decoration of the first class; and the following ladies the decoration of the second class—the Princess Heléne of Meklenbourg, Madames Pezet de Corval, Seraphaniovitch, Rey, Bogolioubow, Sermern, Koulikow, Moskvine, Scalon, Schalfetew, Eggert and Andristow. In addition, 140 ladies who, since the beginning of the war, have worked at the Central Depôt of the Russian Red Cross Society, have each received from the hands of the Empress a gold medal bearing a red cross.

THE number of deaths in London last week was 1380, exhibiting a mortality-rate of 20·1 per 1000. The fatality of whooping-cough still shows a tendency to decline, the deaths from that disease numbering 102, from small-pox 48, from measles 28, from scarlet fever 26, from diphtheria 12, from different forms of fever 22, and from diarrhœa 21. To diseases of the respiratory organs 199 deaths were attributed, whilst different forms of violence accounted for 75.

THE *Graphic* for May 18th has a Red Cross supplement, embodying a great deal of information and many excellent illustrations relating to "British charitable work in Turkey." There are some twenty-six portraits of the principal medical and administrative officers connected with the several hospitals established in aid of the sick and wounded. This issue of our enterprising contemporary will prove especially interesting to medical readers, and should be valued as a record of the humane work accomplished side by side with the wanton cruelties of war.

AN examination for Volunteer Surgeons was held in Manchester on the 15th inst., at the office of the principal medical officer of the Northern District, when the following gentlemen were granted certificates of proficiency:—Surgeon George Bland, 5th Administrative Battalion Cheshire Rifle Volunteers, and Acting-Surgeons J. Somerville, 8th Corps, W. R. Davies, 16th Corps, and T. Shaw, 27th Corps, Cheshire Rifle Volunteers.

SOME of our contemporaries announce that "Captain Sir George Nares is named for a second command of the discovery ship *Alert*." The Antartic regions are, however, intended as the scene of the next exploration. May we venture to record a hope that the contents of a certain very big Bluebook published last year will not have been quite forgotten by "my Lords" before the Antarctic expedition takes its departure."

A LATE number of the Russian *Medical Gazette* gives the following telegram from San Stefano:—"Fifty physicians and fifty-four assistant-surgeons have died in the service of the army of the Danube; thirty-one physicians are on leave; and 114 physicians and 360 assistant-surgeons are ill."

MR. R. N. FOWLER presided at the anniversary festival of the Hospital for Incurables on Tuesday, the 21st inst. Subscriptions to the amount of £2500 were announced in the course of the evening.

THE NEW MEDICAL BILL.

ON Monday last the Lord President of the Council, the Duke of Richmond and Gordon, received at the Privy Council Office, Whitehall, a deputation from the Medical Defence Association, which waited upon him to bring the views of that body before his Grace on the subject of the new Bill, and also to propose amendments in certain clauses which the Association had deemed it incumbent should be incorporated in the new measure ere it is passed into law. The deputation, which was representative in character, consisted, among others, of the following:—Dr. Benjamin W. Richardson, F.R.S., President of the Council; Mr. George Brown, Honorary Secretary; Dr. J. Stevenson, Dr. C. J. White, Snodland, Kent; Dr. H. W. Williams, Dr. W. Beech Johnston, Mr. Thomas Cooke, F.R.C.S., Dr. Walter Smith, Mr. J. Wallis Mason, Mr. F. H. Alderson, Dr. Hugh Adcock, Dr. Royston, Mr. Paramore, Mr. Bott, and Mr. Pridham, solicitor of the Association.

Dr. B. W. RICHARDSON introduced the deputation, stating that they were a large body of medical men associated under the name of the Medical Defence Association. Their business was to prosecute the quack fraternity, and, aided by the Apothecaries' Company, they had successfully suppressed many offenders. By these and other means they had gained a great insight into the working of the Medical Act of 1858. They had read the new Bill with the greatest care, and it had been subjected to discussion at many meetings held to consider its details, and they had drawn up a sketch of their views, two or three of which he would touch on. First, that no person should receive a

licence to practise medicine and surgery who had not passed a full and complete examination in both those subjects and obstetrics. That there should be but one licensing board in each division of the kingdom, the examination to be of a uniform standard, the certificate or diploma to give similar rights and privileges. The examining boards to be appointed by the General Medical Council, that body to regulate the scope of the examinations. The examination fees for the licence to practise should be moderate in amount, and uniform throughout the kingdom. They desired that the new board should have no association whatever with anything that at present existed, either corporations or universities. They felt sure that if it were not done, any Bill now passed would become obsolete in five or ten years, because agitation would again arise if too much attention were paid to one corporation or particular university by any enactment. The corporation would rise against the university and *vice versâ*, whereas a perfectly independent board might be obtained which would meet the wishes of every section of the profession. To carry out this idea it would be necessary to abolish the power of the present licensing boards to grant degrees and diplomas entitling to practise; they would not go so far as to recommend the entire dissolution of these boards, but suggested that if they still retained the power to grant diplomas and degrees, these should be regarded as honorary distinctions only, conferring no right to practise unless the holder had also passed the State examination. That point must be carefully kept in mind in preparing the new Bill, as he believed nine out of every ten members of the profession held those views. It was, however, in their opinion, necessary to make some radical changes in the mode of election and constitution of the General Medical Council. At the present time the profession as a body was not represented on that Council, which was most unjust to the members of the profession, by whom was provided the whole of the funds for the support of the General Medical Council. The profession could never feel confidence in that body so long as they were excluded from having a voice in its constitution. They suggested that in future one-third of the members of the General Medical Council should be chosen by the Crown, one-third by the universities and corporations having the power of granting honorary medical distinctions, and the remaining third by those members of the profession who, according to the Medical Register, were at the time of election resident within the United Kingdom. There was no equality now of representation between the bodies at all: e.g., the University of Aberdeen and Edinburgh, which passed so many hundreds of men every year, and gave them licences to practise, only had one representative between them, while the Apothecaries' Company of Ireland, which granted but twenty-four licences a year, had one representative to itself. By the 6th, 7th, and 8th clauses of the new Bill, an important point was raised in reference to foreign qualifications. They thought the measure might give the Medical Council power of granting a British qualification to foreigners who had no qualification at all in this country. The deputation were opposed to it. There were several eminent men of distinction on the Continent, not qualified men, but who, through their resources in physiology and chemistry, as applied to medicine, were most distinguished men of science, who might, under certain circumstances fairly have a qualification granted; but then there were a great many men in England who would be excluded from that privilege. So that really the foreigner, who came with no qualification whatever, would be a qualified member of the profession, while those of our own country would not have the same right. They thought, also, it would be giving an arbitrary power to the Council which ought not to be exercised. It would be so liable to abuse that it would be better to modify the clauses. The Council should only have the privilege of granting a right to practise to foreigners, however distinguished, where they had been qualified in their own country. Then with respect to Clause 22, relating to the unauthorised assumption of titles by unqualified persons, they approved of the proposed amendments, but suggested that the assumption of an unregisterable medical title after the passing of this Act should be deemed an offence punishable in the terms of the clause; also that a similar penalty should be inflicted on persons who practise medicine and surgery for gain without being duly qualified, whether they assumed a title or not. The clause as it stood would be wholly inoperative as regarded the practice of medicine and surgery by unqualified persons as long as they avoided taking or using any medical title. Unless the clause be amended to cover such cases great injustice would be done to the profession, and the public would be left unprotected if, as was proposed, the power to prosecute unqualified practitioners in England and Wales now possessed by the Apothecaries' Company were abolished. He related the ignorant and knavish character of the quacks whom the Council dealt with, and pointed out, what is too well known to the profession, the different devices of those men to evade the law, and how they had in a vast number of cases succeeded, owing to the inactivity or inability to move, in notorious instances, of the present Medical Council. By the Bill they could not touch those persons who evaded the law by taking presents, not fees. With respect to Clauses 23-4, they would be glad to see their way to admit both dentists and midwives into the profession, but thought it would lead to a deal of jealousy, and it was considered impracticable. If dealt with at all, it should be by a separate Bill.

Mr. GEORGE BROWN, hon. sec., recapitulating many of the arguments adduced by Dr. Richardson, called upon Government to make the measure wide enough to give an unmistakable grasp to the profession over the unregistered practitioners, for the sake both of public health and the interests of the profession.

Dr. GLOVER said that from a long and close observation of the working of the Medical Council he was able to say that the predominance of corporation representatives in that body led to questions of medical education and examinations being discussed from the corporation point of view. As regarded the information kindly given to the deputation by his Grace of his intention to introduce amendments into his Bill compelling the corporations alone to form Conjoint Boards, leaving the universities to act independently, he was sure that would be disappointing to the profession. It was only the presence of the universities in any Conjoint Scheme that made it acceptable. Finally, he expressed his conviction, amid general signs of approval, that this question would never be settled till we got an examining board, for State purposes, entirely independent of the corporations and of their pecuniary interests.

The PRESIDENT replied that it was desirable the quack should not be allowed to practise, and a man had no right to call himself a surgeon if he were not one, or a general practitioner if he had no right to the title. If he had not, by Clause 22, made that clear it could be strengthened. He would consider any amendments. He supposed if a medical man incited, encouraged, abetted, and aided another man (by lending his name) in breaking the law, that medical man was probably amenable to the law. It was agreed that the law was not strong enough on that point, and the question was whether an amended clause they were going to suggest would have that effect. He would do anything that would reach the case of a medical man who gave certificates of death without having been present at the death or known the cause. He promised to look into the other points they had mentioned, and thanked them for waiting upon him. He reminded them, however, that the proposal for a State Board was opposed to his Bill, and he could hold out no hope of agreeing with their "State Examination." Also, with regard to representation on the Council, he did not think it would be at all proper to introduce that in his Bill; he did not say it was an unimportant matter to consider whether the present Medical Council might be altered in its composition, but he could not undertake to do it in his Bill, and if pressed he was afraid his Bill would have little chance of passing through Parliament. With regard to the other matters there was not a bit of difference between their views and his own. He had already taken steps on the subject of a Conjoint Board, which they would appreciate. The Board in England would be composed of the universities, giving the universities of Scotland the power of joining afterwards if they thought fit, and so also Ireland, where there would be no difficulty about her joining. The three kingdoms would thus have conjoint orders upon them, leaving the universities to come in if they thought fit, the universities to have a double qualification both in medicine and surgery. Clause 14 would give the General Medical Council power to see the medical examinations were up to a proper standard.

The deputation thanked his Grace, and retired.

On Tuesday last four other deputations had an interview with the Duke of Richmond and Gordon at the Privy Council Office, to suggest alterations and amendments in

the Bill. The first deputation consisted of Dr. Macdonnell, President of the Royal College of Surgeons of Ireland, and Dr. Macnamara, one of the Medical Council of the same College. They suggested that to make the Bill efficacious there should be double qualifications in medicine and surgery, but thought that no medical authority should be able to grant certificates in more than one of those subjects. They thought it would strengthen the Bill to add midwifery as a separate qualification. They agreed with a compulsory conjoint scheme embracing all medical authorities in each of the three divisions of the United Kingdom rather than a partial conjoint scheme dealing with medical corporations only.

The Duke of RICHMOND and GORDON thought the suggestions made were good, but if he incorporated them in the Bill it might stand in the way of its passing. He promised to consider their proposals.

A deputation consisting of Earl Granville, Sir William Gull, Sir John Lubbock, Bart., M.P., Dr. Sharpey, Sir Philip Grey Egerton, Bart., M.P., Dr. Storrar, Mr. James Heywood, Dr. Quain, and Dr. W. B. Carpenter, representing the University of London, likewise had an interview with his Grace, and pointed out that they desired to call his attention to two matters—the securing of a uniform qualification in medicine and surgery for everyone to be admitted to the practice of medicine, and also conjoint examination in which all the colleges should unite. They desired to bring all examinations to the highest pitch of excellence, so as to secure more complete qualifications for medical practitioners. With regard to conjoint examinations the University of London had taken the initiative in endeavouring to frame such a scheme as would bring about an association of corporate bodies and universities, with the view of meeting existing difficulties, and the scheme had been worked out harmoniously between the universities on the one hand, and the corporations on the other. It would, however, not be easy to do anything unless the universities of Scotland and Ireland became parties to the Conjoint Scheme, and thus prevent the revenue of the Royal College of Surgeons &c. being diminished by illegitimate competition, for they must guard against any one university being open for the admission of candidates at unfairly small fees; and they asked that a guarantee should be given against under-bidding for medical qualifications in other parts of the United Kingdom, which could be secured if the Bill were framed to meet it. They deprecated also the introduction of a "foreign element," such as the General Medical Council, to interfere in matters properly pertaining to universities. They disapproved of compulsion being applied, in respect to the Conjoint Scheme, to corporations and not to the universities. It was not to be expected that English universities would act on such a scheme if the Scotch and Irish universities were left perfectly free. The University of Durham was strongly tempted to underbid others, and it could, by keeping its standard lower, do its utmost to attract men to it. They deprecated any interference of the Medical Council with the freedom of action of the University of London, whose interest it would always be to keep the standard of education very high. If rules were to be framed, they should apply to the United Kingdom, not England alone. If it were made compulsory on all the bodies to frame such a scheme, it would operate in bringing them more closely together, and tend to sink existing difficulties. The standard of examination must be uniform, otherwise men would go to Scotland, and a few pounds would get them on the Register. They thought more latitude should be given to the medical authorities than the Bill contemplated.

The Duke of RICHMOND and GORDON said that any scheme that had now been agreed on and then submitted would come under this clause without reference to any future formation of schemes either in Scotland or Ireland. If all the English bodies were agreed upon a scheme before the passing of this Bill, the Bill, when it became law, would pass the scheme so agreed upon.

The Deputation thought that, without this Conjoint Scheme, medical education would not advance, because it set free the universities for the purposes of medical education, whereas at present the Scotch universities were kept down in order to give licences.

The Duke of RICHMOND and GORDON remarked that his Bill was for the public weal. He had thought over the Conjoint Scheme when preparing the Bill, but thought it would overweight it and prevent its passing if he had introduced it. He had, however, thought it advisable, in the interest of medical education, to have it in some shape, and he had proposed an amendment covering it. He could not agree that if there was a Conjoint Scheme for England comprising all the universities and corporations that therefore a number of young men wishing to enter the profession and did not wish to pass the Conjoint Board would take refuge in Scotland, where they would get their examination of a milder and less sharp character than would be admitted by the Conjoint Board, because so long as the Medical Council existed it would have power by the Bill of seeing that the examinations held were of such a character as they believed they ought to be, and such as would uphold the dignity of the profession and be for the benefit of all other persons interested. The Bill contemplated a different state of things to what had hitherto prevailed, because it set up a double qualification. Nor could the state of things they had depicted exist after the Bill became law. With regard to registration, the Bill stated that after the commencement of the Act the medical registrar should not register a person unless he held a double qualification in medicine and surgery.

The deputation thought that would give great satisfaction to the Council.

The Duke of RICHMOND and GORDON remarked that the Bill did not altogether secure absolute uniformity. With regard to the Medical Council initiating the scheme, it was in consequence of the representations made to him by members of the Medical Council, and he felt it was a duty they could not perform without that clause; he had amended it in a way put down on the notice paper.

A deputation from the Medico-Ethical Association of Manchester waited on the Lord President at two o'clock on Monday. It was introduced by Sir Thomas Bazley, M.P., and accompanied by Hugh Birley, Esq., M.P., W. T. Charley, Esq., M.P., J. T. Hibbert, Esq., M.P., O. O. Walker, Esq., M.P., Edward Hardcastle, Esq., M.P. It consisted of Dr. Royle, J.P., President of the Association; Dr. John Tatham, President of Parliamentary Committee of the Association; and Mr. John Broadbent, one of the hon. secretaries. Dr. Royle made a most animated appeal to the Duke to introduce into his Bill clauses that would provide a single portal to the profession; direct representation of the profession on the Council; and more effective punishment of those who, without qualification, practised medicine.

His GRACE, in reply, said that he proposed to introduce amendments into the Bill compelling the conjunction of the corporations. Regarding the direct representation of the profession, the Lord President said no doubt that was an important question, but it could not be dealt with in this Bill. It must be dealt with separately. As to the punishment of unqualified practitioners, he did not see his way clear to do more than prohibit the assumption of false titles. If he had typhoid, and chose to be treated by a blacksmith, why, in this free country, should he not have his way? The deputation, after duly thanking his Grace, then retired.

A deputation from the East London Medical Defence Association waited on his Grace the Duke of Richmond at the Privy Council Office on Tuesday at three o'clock. It was introduced by Dr. Lush, M.P. Mr. Nelson Hardy, Dr. Rogers, and Mr. R. H. S. Carpenter addressed the Lord President in favour of amendments for securing a single examining board, conjoint or independent; direct representation of the profession, and penal clauses that would be available against all forms of medical fraud and immorality. His Grace listened with the utmost patience as Mr. Carpenter, from his vast experience, explained at great length the weak points in the present penal clauses, and in those of the present Bill. On the main points he gave similar replies to those given to previous deputations.

THE NEW DIETARIES FOR PRISONS.

THE Report of the Committee appointed to inquire into the Dietaries of the Prisons of England and Wales is supplemented by a series of new diet tables recommended by them, and which came into force on the 15th of May. It is evident that the Committee had no easy task before them in endeavouring to harmonise, as far as possible, the interest

of the public in economy with strict justice to the prisoner; and they have certainly laboured, by careful consideration of the commercial value of different food stuffs in relation to their nutritive value, to construct a scheme of diet which would effect an improvement without increasing the total cost. The following table shows concisely the diet recommended for each class of prisoners, according to the length of sentence:—

Class I.			Class II.		
Meals.	Seven days and under.	With or without hard labour.	More than seven days and not more than one month.	Men with hard labour.	Men without hard labour; women; boys under 16.
Breakfast	Daily: Bread	8 oz.	Daily: Bread	6 oz.	5 oz.
			Gruel	1 pint.	1 pint.
Dinner	Daily: Stirabout, 3 oz. of Indian meal, and 3 oz. of oatmeal	1½ pints.	Sunday: Bread	6 oz.	5 oz.
			Wednesday: Suet pudding	8 oz.	6 oz.
			Monday: Bread	6 oz.	5 oz.
			Friday: Potatoes	8 oz.	8 oz.
			Tuesday, Thursday, Saturday: Bread	6 oz.	5 oz.
			Soup*	½ pint.	½ pint.
Supper	Daily: Bread	8 oz.	Daily: Bread	6 oz.	5 oz.
			Gruel	1 pint.	1 pint.

Class III.					Class IV.		
Meals.	More than one month and not more than four months.	Men with hard labour.	Men without hard labour; women; boys under 16.	Prisoners waiting trial; misdemeanants, 1st division; & destitute debtors.	More than four months.	Men with hard labour.	Men without hard labour; women; boys under 16.
Breakfast	Daily: Bread	8 oz.	6 oz.	6 oz.	Daily: Bread	8 oz.	6 oz.
	Gruel	1 pint.	1 pint.	1 pint.	Porridge‡	1 pint.	—
	Cocoa	—	—	½ pint.	Gruel	—	1 pint.
Dinner	Sunday and Wednesday: Bread	4 oz.	4 oz.	4 oz.	Sunday and Wednesday: Bread	6 oz.	4 oz.
	Potatoes	6 oz.	6 oz.	6 oz.	Potatoes	8 oz.	8 oz.
	Suet pudding	8 oz.	6 oz.	6 oz.	Suet pudding	12 oz.	10 oz.
	Monday† & Friday: Bread	8 oz.	6 oz.	6 oz.	Bread	8 oz.	6 oz.
	Potatoes	8 oz.	8 oz.	8 oz.	Potatoes	12 oz.	10 oz.
	Cooked beef without bone	3 oz.	3 oz.	3 oz.	Monday† & Friday: Cooked beef without bone	4 oz.	3 oz.
	Tuesday: Bread	8 oz.	6 oz.	6 oz.	Tuesday: Bread	8 oz.	6 oz.
	Thursday: Potatoes	8 oz.	6 oz.	—	Thursday: Potatoes	8 oz.	8 oz.
	Saturday: Soup*	½ pint.	½ pint.	½ pint.	Saturday: Soup*	1 pint.	1 pint.
Supper	Daily: Bread	6 oz.	6 oz.	6 oz.	Daily: Bread	8 oz.	6 oz.
	Gruel	1 pint.	1 pint.	1 pint, or ½ pint.	Porridge	1 pint.	—
	Cocoa	—	—		Gruel	—	1 pint.

* Soup 1 pint = 4 oz. of coarse beef; 4 oz. of split peas; 2 oz. of fresh vegetables; ½ oz. onions; pepper and salt.
† Mondays: Beans and fat bacon may be substituted for beef.
‡ After nine months, 1 pint of cocoa and 2 oz. extra bread may be given, if preferred.

The Committee have retained the principle of "progressive dietaries," inasmuch as prisoners committed for a period of not more than a month are for the first week of confinement placed on the diet of Class I.; those committed for not more than four months begin with Class II.; and those whose sentences are for more than four months remain for that period on the diet allotted to Class III. before passing to the higher scale.

Whilst agreeing in the main with the proposed alterations, we must object to the diet of Class II., for men *with hard labour*, as being too severe. It must be remembered that prisoners who are submitted to this diet have already experienced a week of severe restriction on the diet of Class I., and for men at hard labour the increase to Class II. is certainly insufficient for their physiological requirements. We would recommend that prisoners committed with hard labour in this division, after the preliminary week on the low diet of Class I., should be at once passed to the diet of Class III. For prisoners without hard labour, for periods not exceeding one month, the diet of Class II. is quite sufficient.

One notable feature in the new dietaries is the greater variety in the kind of food. Thus the Committee have taken the novel step of substituting fat bacon and beans for cooked beef on one of the days of the week. We believe this to be a step in the right direction, and that the change will not only be a welcome break in the monotony of the prisoners' diet, but a direct saving to the community. Thus, the beef dinner costs, at present prices, 4¾*d.*, whilst the beans and bacon dinner costs 2¼*d.* Theoretically the latter is superior in nutritive value, and the experience of other nations shows that, when properly cooked, the pulses are highly digestible. If the experiment succeeds, and the cost of meat increases, it would be a question, the Committee think, for serious consideration, whether it may not be advisable to diminish the outlay on meat by the substitution of foods which are equally nutritive and far less costly.

Correspondence.

"Audi alteram partem."

THE COUNCIL ELECTION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—No charge of ambiguity in my correspondence with Mr. Bennett May can rest with me. He seems, however, to have read my reply unintelligently, and without appreciation of its significance.

To his second series of misstatements and suppositions, in so far as they relate to me, I now give a general and specific denial. Collectively, and in detail, they are utterly untrue.

Had I recognised the personal animus which dictated his first slanders, I should not have deigned to reply; but, having once responded, this second contradiction seems to be an obligation.

I would remind Mr. May that he has permitted an imaginary grievance so to warp his judgment as to lead him to disregard the simple courtesies of correspondence, and to forget the social laws which restrain men from making accusations that are unsupported by an iota of proof.

With imaginary wrongs no argument can be held, and Mr. May's professed readiness to "retract" when contradicted is no justification of false and injurious statements circulated in a public journal. No retractation or apology can remove the culpability of such conduct.

With these remarks, I take leave of Mr. May, whose future effusions I shall not notice.

Believe me to be, faithfully yours,

Birmingham, May 21st, 1878. ALFRED BAKER.

To the Editor of THE LANCET.

SIR,—In your Annotations of the 18th May you use the word "eligible" in a sense which implies that only such Fellows as you mention in order of seniority are eligible for election into the Council. If this were the fact, the choice of suitable representatives would indeed be limited, and if generally so small a number were suitable it would be sometimes difficult to avoid making an improper selection. This possible misconception induces me to remind your readers of the conditions which constitute eligibility, and also, as it seems to me, which govern the mode of reckoning the seniority of the eligible. According to the 7th section of the Charter of 1852 no Fellow is eligible who has not been a Fellow of the College for fourteen years, or a member for twenty years, or is not in the *bonâ fide* practice of his profession as a surgeon, or is practising as an apothecary at the time of election. But every Fellow of such standing as Fellow or member as aforesaid shall be eligible as a member of the Council. Since all the gentlemen whom you name have fourteen years of fellowship, their seniority among themselves must be counted from the dates of their diploma of membership. Furthermore, it is clear from the wording of these conditions that seniority was not intended to be the main qualification for election into the Council, but that the Fellows should select from the large body who have the moderate seniority insisted upon. There are 850 members who have fourteen years' standing as Fellows, besides those of more recent fellowship whose seniority as Members brings them within the eligible category. It is important that the electors bear in mind the intentions of the Charter to counteract the tendency to give mere seniority undue influence in the elections, and thus ensure that the Council shall consist entirely of members still actively engaged in professional work, to the exclusion of those whose chief claim is their seniority. A further proof of this intention of the framers of the Charter is the clause in the 7th section of the Charter to which you occasionally draw attention—namely, "If any member of the Council shall at any time after his election cease to be in the *bonâ fide* practice of his profession as a surgeon, or shall practise as an apothecary, he shall thereupon cease to be such member of the Council, and shall forfeit all his rights and privileges as such member thereof." No stronger evidence could be given that the Council should consist solely of practising surgeons, and consequently of those best able to represent the wishes and opinions of their brethren with whom they are of necessity continually in communication.

I have the less scruple in urging the importance of not being too rigidly governed by the claims of seniority when selecting candidates at the present time, because among those whom you have already mentioned as possible candidates there is not one who need rest his claim on his seniority, but has solid reason in his own professional position for soliciting election into the Council of the College of Surgeons. I am, Sir, yours, &c.,

May 20th, 1878. BERKELEY HILL.

*** The word "eligible" to which Mr. Hill objects could not, on his own showing, reasonably be expected to extend to *all* the Fellows who may or can offer themselves for election. Mr. Hill tells us there are at least 850 *eligible* candidates, and we offer his calculation as a satisfactory justification for limiting the number of names to seven or eight. Even so, the list is unusually long. Although the vacancies have not yet been officially announced, there are, we believe, not less than seven Fellows who have made known their intention of contesting the election. Besides these, any or all of the three retiring candidates may also seek re-election. With ten candidates for three seats we cannot join in Mr. Hill's lamentation over the narrowness of the choice. The word "eligible" was intended to imply that the gentlemen we named were the Fellows who had by seniority and rotation come to the front. Mr. Hill's argument about the seniority reckoning from the date of membership is logically inconsistent. The membership of itself confers no right, claim, or privilege on the holder, either to vote or become a candidate for election. Section 10, Charter 7th Victoria, states "that from henceforth no member of the said College, who shall not also be a Fellow of the same, shall be eligible as a member of the Council of the said College"; and Section 7 of Charter 15th Victoria provides that no Fellow shall be eligible until he have been a Fellow for fourteen years. It is the fellowship, and the fellowship only, that gives a member the right to vote, and it is his standing as a Fellow that establishes his eligibility for election. The membership alone cannot do this, no matter how long its duration. The specious argument that the membership should decide the seniority was adopted by a coterie for a set purpose a few years ago, but has never been regarded with favour by the well-informed. It has hitherto been the custom to allow the seniority among the Fellows to determine the order in which candidates shall come forward, and what custom has in this instance established, good taste and feeling approve.—ED. L.

THE CAUSE OF DEATH OF THE LATE ARCHBISHOP WHATELY.

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 18th there is a communication from Dr. Scriven, in which he says "he attended the late Archbishop Whately in his last illness," and asserts that I "have been entirely misinformed as to the nature of his disease and the cause of his death," in having attributed it to hæmorrhage, which might have been avoided by any ordinary surgical care, but that there were only homœopaths to attend him.

Dr. Scriven's correction of my misstatement, as he is pleased to call it, is as follows in his letter:—"After death I renewed the dressings which had been applied *on the leg the day before*, and *discovered that a small vessel had given way*, allowing the escape of an ounce and a half, or, at most, two ounces of blood." That is his own statement in his own words, that after death, and after the removal of dressings which had been allowed to remain applied from the day before, he then *discovered* that *a small vessel* had given way, and that an ounce and a half, or, at most, two ounces, of blood, had escaped. How he discovered the size of the vessel, and how he measured the quantity escaped, he does not tell us.

The following is the account of the cause of death given in his life and correspondence by his daughter, E. Whately, vol. ii., p. 419:—"The physician arrived at his usual hour (12 o'clock), ten minutes after Dr. Whately had breathed his last. We then found that *the immediate cause of death had been the bursting of an artery* in the leg."

I do not think it necessary to make any comment.

Yours truly,

Dublin, May 18th, 1878. D. J. CORRIGAN.

THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—If, as I learn from a recent number of the *Overland Mail*, a committee is sitting, or about to sit, to try to solve the difficulty of the Army Medical Department, let me suggest as one thing to be remedied—title and rank. Let them

be *real*, and not *sham* as at present. The mistake about this rank is shown very distinctly in India—after all, our greatest and most military dependency.

We have in India a staff corps, and members of this staff corps are employed in various civil employments, but this does not do away with their military rank. For instance, the first name on the Madras Staff Corps is Robson Benson, assistant commissary-general, but a colonel in the army. Now, Robson Benson is not addressed as "Commissary-General Benson"; he is Colonel Benson, and when he becomes a general, will be General Benson briefly. Why not treat, say, Surgeon-General Mackenzie the same way, and call him General Mackenzie? So of the Engineers, we have, say, Major Scott. You do not call him Engineer-Major Scott; he is plainly Major Scott, R.E. Why, if he were a doctor, should you call him Surgeon-Major Scott? Why not call him Major Scott, M.D.?

If you give a man a title which carries a certain rank, give him honestly the title and rank; don't clip it and maul it in such a manner that it does not pass current. That it does not pass current I could give you hundreds of proofs; let one suffice. Turn to an Army List. I will take the one I have already quoted. In her Majesty's 43rd, if you look at the staff, you see four names down: "instructor of musketry," "adjutant," "quarter-master," "medical officer." The medical officer's name last; and yet he is a surgeon-major, ranks as a lieutenant-colonel. The three names *above* him are lieutenants only. Comment on this is needless. What is rank, if it is treated thus?

It is the same all through. If this puerile game, which deceives no one, were honestly done away with, the Army Medical Service would be as popular as the Engineers or Artillery.

Yours faithfully,

MILES INDICUS.

ARSENIC IN VIOLET POWDER.

To the Editor of THE LANCET.

SIR,—During the past week a member of this hospital brought me a sample of violet powder for examination. Its use in the nursery had been attended with the most serious results—results which were at first attributed to other causes. On analysis it was found to contain white arsenic, and some lead compound, probably the oxycarbonate. I determined the amount of white arsenic, and found 4½ grains in 100 grains of powder. The precise amount of the lead compound was not determined. I am informed that the powder was purchased at a respectable retail chemist's in the north of London. Judging from the presence of compounds of the two metals—lead and arsenicum—in what we may call moderate proportions, this powder appears to be one of those vile toilet preparations noticed in the columns of THE LANCET a short time ago.

I am, yours, &c.,

WILLIAM FOSTER, B.A., F.C.S.
Lecturer on Chemistry, Middlesex Hospital Med. Coll.

May 21st, 1878.

Obituary.

HENRY JEPHSON, M.D.

WE announced last week the death of one of the most remarkable physicians which this century has seen. We allude to Henry Jephson, M.D., of Leamington, who died at his residence, Beech Lawn, on May 14th. He was born on October 4th, 1798, near Mansfield, in Nottinghamshire. As a youth he showed much interest in scientific studies, and while experimenting with fulminating silver he blew off the first and second fingers of the right hand. In after-life, when his marvellous success in practice left him hardly a minute which he might call his own, he had a laboratory in which he occasionally snatched a few hours of relaxation. When quite a youth he became a pupil of Mr. Alcock, and was entered at St. George's Hospital. Here he made the acquaintance of Mr. Brodie, afterwards Sir Benjamin Brodie, who was house-surgeon there, and the friendship between them continued until Sir Benjamin's death. Mr. Chambers, of Leamington, required an assistant, and on applying to Mr. Alcock, young Jephson was strongly recommended by the latter to Mr. Chambers. This was in 1818. The success of the young surgeon, first as assistant and then as principal, was remarkable, and seeing his way, from the reputation he had already acquired, beyond the place he lived in, he determined to fit himself for the highest success attainable. He went to Glasgow, where, after the usual residence, he proceeded to the degree of M.D. In 1828 he removed to Cheltenham, where it was his intention to reside and practise, but a deputation of his old friends and patients waited on him, requesting him to return to Leamington. From this time forward until 1848, exactly twenty years, he had what probably was, and possibly still is, the most extraordinary success ever achieved by any physician. Patients from all parts of the kingdom, from the colonies, and from the continent of Europe thronged to Leamington. His time was occupied almost night and day. He received summonses—rare in those days—to all parts of the country for consultations, and he had a specially contrived travelling carriage made for these journeys. The income he acquired was almost fabulous; for several years it was over £20,000, and it once reached £24,000 in a single year. As the result of these labours his health began to fail in 1846. In 1847 he first perceived that failure of vision which in 1848 resulted, in spite of the best of advice from Dalrymple and Sichel, in total blindness. It was attributed to what was then called gouty amaurosis, but it was probably not unconnected with failure of nerve power, the result of over-work. Subsequent to 1848 he lived in retirement in the house which he built for himself during his great success. The circumstances which led to the extraordinary success of Dr. Jephson are not likely to recur. He was most generous with his wealth, and Leamington has in her public institutions of all kinds to remember him with deep gratitude. He was for many years a county magistrate, and in Warwickshire was, apart from his profession, most deservedly admired and esteemed. About a month ago his increasing weakness arising from failure of nervous power, probably dependent upon degeneration of the nerve structure, alarmed his friends. Dr. Quain, of Harley-street; Dr. Heslop, of Birmingham; and Mr. Kimbell, of Knowle, Warwickshire, gave every assistance to his local medical friend, Dr. Thursfield, of Leamington; but, in spite of all their efforts, he gradually and surely declined, and died on May 14th.

He married, in 1826, Anne Eliza, daughter of the Rev. Dr. Geldart, Rector of Kirk Deighton, in Yorkshire, who died in 1874. One child, who died in infancy, was the issue of this marriage. Dr. Jephson was buried, quite privately, beside his wife, in the rural churchyard of Old Milverton, near Leamington, on May 17th, 1878.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at meetings of the Court of Examiners on Tuesday and Wednesday last:—

Barnard, J. Henry, Fulham.
Biden, W. Price, Peckham.
Blacker, Ernest, L.R.C.P. Edin., Bath.
Clements, W. George, Rochester.
Corbyn, F. Henry, L.R.C.P. Edin., Cheltenham.
Davis, George, L.R.C.P. Lond., Blackheath.
Dowsley, D. Henry, M.D., Clinton, Canada West.
Drought, E. Napoleon, Winchmore-hill.
Faulkner, A. Samuel, Liverpool.
Groome, W. Wollaston, Monks Soham.
Hough, C. Henry, Cambridge.
Jackson, G. Henry, L.R.C.P. Edin., Liverpool.
Jones, R. Dennett, Conway, North Wales.
Macdonald, G. Alexander, Hull.
M'Keough, G. Thomas, M.D., Chatham, Canada.
Morton, A. Charles, L.S.A., Aylsham.
Parke, T. Henry, Tideswell.
Pettinger, J. Henry, Manchester.
Porter, W. Smith, Sheffield.
Powell, J. James, Weybridge.
Russell, J. W. Leonard, Sheffield.
Stein, C. Guthrie, Cape Town.
Stuart, H. Ogilvy, L.S.A., Woolwich.
Webb, H. Langley, L.S.A., Cheadle, Staffordshire.
Williams, Dawson, Burnby, near York.

The following gentlemen passed on the 22nd inst.:—

Ambler, H. Edward, Hemel Hempsted.
Bibby, John, Preston.
Biggs, J. Maundy, Dallington, Sussex.
Bousfield, E. Collins, Bedford.
Copley, W. Henry, Melton Mowbray.
Cowan, F. Samuel, Bath.
Davies, H. Edward, Llanddulas.
Flower, G. J. William, Stafford, Dorset.
French, F. Nalder, Over, Cheshire.
Fuller, L. Henry, Bath.
Gover, H. John, M.B., Clapham.
Haslam, W. Frederic, Reading.
Kidd, Percy, Blackheath.
Jackman, G. Frederick, Beaulieu, Southampton.
Jackman, W. Thomas, Stoke-Newington-road.
Newman, A. Joshua, L.S.A., Watton, Herts.
Walter, W. Henry, Sydenham.

For the Primary Examination for the Fellowship of the College, which commenced on the 24th inst., there are over 70 candidates.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at meetings of the Board of Examiners on the 16th and 17th inst.:—

Challoner Clay, M. D'Oyley Gilkes, John M. Owen, J. Rigby, James Anderson, Frederick M. G. Smith, Augustus P. Hills, J. Winthrop Woodruffe, Percy H. Gardner, H. D. Davenport, F. W. Pilkington, and B. H. Lane, Guy's Hospital; Arthur Willis, J. A. Gray, Francis H. M. Burton, T. Underwood Gray, Arthur E. Boot, J. Sidney Hunt, E. V. A. Phipps, H. G. Terry, L. W. Cockburn, J. M. Nicholls, and T. P. Taylor, St. Bartholomew's Hospital; John A. Webster, Thomas R. C. Edwards, and J. L. Bousignac, St. Mary's Hospital; Robt. E. Rygate and David J. Rygate, London Hospital; Wm. C. Adams, Eugene A. Laurent, Thos. J. Evans and J. Beddow, University College; R. Taylor, St. Thomas's Hospital; David G. Edwards, Liverpool; Frank Newcombe, Middlesex Hospital and Aberdeen.

Of the 130 candidates examined during last week, 55 failed to satisfy the Board, and were referred for three months' further anatomical and physiological study. — The total number of candidates admitted to the Primary Examination in Anatomy and Physiology during the past and present months was 461, of whom 156 failed to reach the required standard, and were referred. The number during the corresponding period last year was 468, and the rejections were 144.

[The name "E. A. S. Elliott," in the last list of gentlemen who passed the Primary Examination in Anatomy and Physiology, should have been E. A. S. Elliot.]

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on May 16th:—

Dáculá, Edalgi Manekji, Gower-place.
Hawkins, Walter Robert Thomas, Bristol.
Nicod, Louis Charles Napoleon, Oxford-road, Ealing.

THE Hastings Guardians have unanimously increased the salary of Mr. Edward Paget Thurstan, medical officer for No. 3 district, from £100 to £115 per annum.

MR. ALDERMAN JAMES ATKINSON, M.R.C.S., Mayor of Crewe, was on Tuesday, May 21st, sworn in as a Justice of the Peace for the City and County Palatine of Chester.

AT a special Court of Governors of the Royal Surrey County Hospital, Guildford, the proposed alteration in the rules, under which out-patients will in future be charged a shilling for each letter, was, though strenuously opposed, confirmed by 24 to 21; whereupon a poll was demanded, which is to take place on Saturday, the 25th (to-day).

THE French Association for the Advancement of Science, which was started the year after the late war, and has already held successful meetings annually at different provincial towns, will, on account of the probable greater attendance of foreign *savants*, owing to the Exhibition, this year meet at Paris. The Municipal Council has taken the matter in hand; and the meeting, which will commence on Aug. 16th, is likely to be a very successful one. M. Frémy, member of the Institute, and professor at the Ecole Polytechnique and the Museum of Natural History, will preside.

DONATIONS TO MEDICAL CHARITIES.—The Goldsmith's Company have given £100 to the Royal Free Hospital building fund. The Court of Common Council have voted £105 to the East London Hospital for Children, and £25 10s. to the National Orthopædic Hospital. Mr. John Wilkins has given £105 towards the Chelsea Hospital for Women building fund.

Medical Appointments.

ALEXANDER, C., M.D., C.M., has been appointed a Medical Officer for the Parish of Nairn, vice Cameron, resigned.

ANGOVE, E. S., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been reappointed Medical Officer of Health for the Camborne Urban Sanitary District, at £50 for one year.

ARMISTEAD, W., M.B., C.M., has been appointed Medical Officer of Health for the Haverhill Urban Sanitary District.

BARNES, G., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Chard Urban Sanitary District, at £2 2s. for each occasion of employment by the Authority.

BOND, F. T., M.D., has been reappointed Medical Officer of Health for the Awre, Cirencester, Newnham, Tetbury, and Westbury-on-Severn Urban, and Chepstow, Chipping-Sodbury, Cirencester, Dursley, Gloucester, Tetbury, Thornbury, and Westbury-on-Severn Rural, Sanitary Districts, at £600 per annum for five years, and £200 per annum for travelling expenses.

BRIGHAM, H. G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer to the Royal Pimlico Dispensary.

CHAPMAN, W., F.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for Lower Tooting, vice Noel, resigned.

CONNON, C. J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the No. 3 or Cradley District of the Bromyard Union, Herefordshire, at £50 per annum and fees, vice Peniston, resigned.

CRUICKSHANK, B., M.D., C.M., M.A., has been appointed a Medical Officer for the Parish of Nairn, vice Cameron, resigned.

DOMENICHETTI, R., M.D., L.R.C.S.Ed., Deputy Inspector-General, Army (half-pay), has been reappointed Medical Officer of Health for the Louth Rural and Urban Sanitary Districts, at £500 per annum for five years.

DREWITT, F. G. D., M.R.C.S.E., has been appointed House-Physician to St. George's Hospital.

FISHER, J. A., L.R.C.P.Ed., L.F.P.S.G., has been appointed Medical Officer of Health for the Garston Urban Sanitary District, Lancashire, at the rate of £30 per annum, until the 31st August, vice Worthington, deceased.

FRANKS, K. M. St. John, M.D., L.R.C.S.I., has been appointed a Surgeon to the Adelaide Hospital, Dublin, vice Walsh, resigned.

GAWITH, J. J., M.R.C.S.E., L.S.A., has been appointed Honorary Medical Officer to the Kilburn, Maida-vale, and St. John's-wood General Dispensary, vice Deacon, resigned.

GIBSON, C. P., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Wetherby, vice Armstrong, resigned.

GLANVILLE, F. F., M.R.C.S.E., has been appointed House-Surgeon to the Belgrave Hospital for Children, vice Drewitt.

HALL, E., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Newtown and Llanllwchaiarn Urban Sanitary District, Montgomeryshire, at £40 per annum for three years.

HARDIE, D., M.B., C.M., has been appointed Assistant Medical Officer to the Inverness District Lunatic Asylum, vice Mann, resigned.

HARTLEY, Mr. J., has been appointed a Resident Physicians' Assistant to the Middlesex Hospital, vice Macausland, whose appointment has expired.

HUGHES, J. R., M.D., M.R.C.S.E., has been appointed Medical Officer of Health for the Denbigh Urban Sanitary District, at £25 per annum, vice Roberts, resigned.

JONES, R., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for Flint, vice Vickers, deceased.

LENDON, Mr. A. A., has been appointed a Resident Physicians' Assistant to the Middlesex Hospital, vice Newman, whose appointment has expired.

MORSHEAD, E. G. A., L.R.C.P.I., M.R.C.S.E., has been appointed a Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Dobson, whose appointment has expired.

NESBITT, R., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Apothecary and Registrar to the County Monaghan Infirmary, vice Adams, resigned.

PALMER, H. D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-arranged No. 8 District of the Lexden and Winstree Union, Essex, at £45 per annum and fees, vice Hair, whose appointment will expire at Midsummer.

PARKER, R., L.A.H.D., has been appointed Apothecary and Registrar to the County Infirmary, Roscommon, vice Thompson, resigned.

PARSON, H., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed an Assistant Medical Officer to the Royal Surrey County Hospital, Guildford, vice Schollick, appointed a Medical Officer.

RICH, Mr. E. A., has been appointed a Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton vice Jewell, whose appointment has expired.

ROSS, R. A., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon and Secretary to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary, vice Sparrow, resigned.

STRATTON, C. R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Wilton District of the Wilton Union, at £70 per annum and vaccination fees, vice Good, resigned.

TAYLOR, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-formed No. 10 District of the Lexden and Winstree Union, at £40 per annum and fees.

TWEEDY, J., L.R.C.P.L., F.R.C.S.E., has been appointed Ophthalmic Surgeon to the Great Northern Hospital, vice Lowne, resigned.

WALKER, J. M., M.B., C.M., has been appointed Medical Officer for the No. 3 District of the Cheltenham Union, at £60 per annum and fees, vice Broom, resigned.

WELLS, Mr. C., has been appointed Resident Obstetric Physicians Assistant to the Middlesex Hospital, vice Macintire, whose term of office has expired.

WILLIAMS, J., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for Holywell, vice Vickers, deceased.

WORTS, C. J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the newly-arranged No. 9 District of the Lexden and Winstree Union, at £75 per annum and fees, Trimmer, resigned.

Births, Marriages, and Deaths.

BIRTHS.

ANDREW.—On the 15th inst., at Hope-street, Edinburgh, the wife of James Andrew, M.D., of a son (still-born).
BRYAN.—On the 21st inst., at Spa House, Leicester, the wife of Clement F. Bryan, M.R.C.S. &c., of a son.
CHAMBERS.—On the 17th inst., at Clyde-terrace, St. John's-road, Sandymount, the wife of Charles Hall Chambers, M.R.C.S.E., Staff-Surgeon, R.N., of a daughter.
CROLY.—On the 11th inst., at Tinahely, co. Wicklow, the wife of Richard Croly, L.K.Q.C.P.I., of a daughter.
DALY.—On the 13th inst., at Kingston-Bagpuize, the wife of Joseph H. Daly, L.R.C.P.I., of a daughter.
JARDINE.—On the 12th inst., at Stanwix, the wife of J. Jardine, M.D., Surgeon-Major, Army (retired), of a son.
MAPOTHER.—On the 17th inst., at Merrion-square North, Dublin, the wife of Edward D. Mapother, M.D., of a daughter.
ROWLAND.—On the 17th inst., at Gloucester House, Malvern Wells, the wife of H. Mortimer Rowland, M.D., of a son.
THOMSON.—On the 24th February, at sea, on board the ship *Otaki*, from New Zealand to London, the wife of A. T. Thomson, M.D., of a son.
UNDERHILL.—On the 16th inst., at Moseley-road, Birmingham, the wife of Frank Underhill, Surgeon, of a son.
WILL.—On the 18th inst., at Union-terrace, Aberdeen, the wife of John Charles Ogilvie Will, M.D., of a daughter.

MARRIAGES.

FLOWER—POPE.—On the 9th inst., at the Parish Church, Biggleswade, Thomas Flower, M.R.C.S.E., to Jessie Susan, daughter of William Pope, Esq.
MOUAT—MATHEWES.—On the 9th inst., at St. George's Cathedral, Madras, George Bridges Mouat, M.D., Surgeon-Major, to Florence, daughter of John Mathewes, Esq.

DEATHS.

ATKINSON.—On the 11th inst., at Sunniside, Sunderland, George Atkinson, L.S.A.L., aged 67.
CLORAN.—On the 24th March, at Loughrea, co. Galway, John Joseph Cloran, L.A.H.D., aged 61.
EALES.—On the 17th inst., at Camden-road, William Penn Hele Eales, M.R.C.S.E., aged 68.
ELKINGTON.—On the 16th inst., at Alcombe, near Dunster, Somersetshire, Francis Elkington, M.D., M.R.C.S.E., L.S.A., & F.O.S., late of Brockville, Ontario, and formerly (for many years) of Birmingham, England.
GRANT.—On the 10th inst., at Hendon, William Grant, M.D., aged 40.
HAINES.—On the 9th inst., at Littleworth, Gloucestershire, William John Haines, M.R.C.S.E., aged 22.
HEATH.—On the 12th inst., at Baltinglass, Edward N. Heath, L.R.C.S.I.
JACKSON.—On the 21st inst., at his residence, Wallgate, Wigan, Lancashire, after a few days' illness, John Jackson, L.R.C.P.Ed. &c., aged 36.
MANSON.—On the 1st ult., at Foochow, China, David Manson, M.D., aged 30.
MILLER.—On the 8th inst., at the Lunatic Asylum, Powick, Reuben Zaccheus Miller, M.R.C.S.E., aged 40.
SANDYS.—On the 15th inst., at Eversholt House, Woburn, Samuel Sandys, M.R.C.S.E., aged 67.
SCAIFE.—On the 19th inst., at Sydenham House, Low Harrogate, Christopher Scaife, M.R.C.S.E., aged 58.
SCHOOLES.—On the 12th inst., at Hythe, Henry James Schooles, M.D., Deputy Surgeon-General, Army, aged 62.
VICKERS.—On the 3rd inst., at Holywell, Flintshire, Thomas Vickers, M.R.C.S.E., aged 72.
WILLIAMS.—On the 21st inst., at Redland, near Bristol, John Williams, F.R.C.S., Surgeon-Major, Army.
WILLIAMS.—On the 29th ult., at Llanfyllin, Eyton Owen Williams, M.D., aged 37.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*

BOOKS ETC. RECEIVED.

Dr. G. G. Bantock on the Treatment of Rupture of the Female Perineum.
J. A. Russell: Sanitary Houses.
J. Hutchinson: Illustrations of Clinical Surgery. Fasciculus XI.
Dr. J. B. Berkart on Asthma.
The Glasgow Medical Journal. May.
My Holiday: Where shall I spend it?
Mr. G. C. Coles: Temperature Charts.
Guide for Glengarriff and Killarney.
A. H. McClintock: Smellie's Midwifery. Vol. III.
C. Creighton on Physiology and Pathology of the Breast.
W. C. Woodhead: The Dangers of Sewer-gas in our Dwellings.
T. Gray: Under the Red Ensign.
Dress, Health, and Beauty. A Book for Ladies.
C. Baltet: The Art of Grafting and Budding.
London University Calendar. 1878.
Dr. L. A. Duhring: Atlas of Skin Diseases.
The Magazine of Art. Part II.
Dr. H. Duret: Etudes Expérimentales et Cliniques sur les Traumatismes Cérébraux.
Dr. W. Sharpe: The Conqueror's Dream, and other Poems.
J. E. Ellison on Ventilation.
The Pantile Papers. No. IV.

Notes, Short Comments, and Answers to Correspondents.

IODOFORM.

IN some experiments on the action of iodoform upon animals, Binz and Möller have lately come to conclusions that it has far less influence than had been supposed by Franchino and Righini. The latter found that in dogs and guinea-pigs anæsthesia was produced; but Binz believes that this must have been due to poisoning by carbonic acid, since the animals experimented on were gently strangled by the apparatus. It was found that on the internal administration of iodoform to animals, narcotism did occur at a period which depended on the dose of the drug. After death, intense fatty degeneration of heart, liver, &c., was found, and it is suggested that this effect is due to the decomposition of the iodoform and the liberation of iodine, possibly in consequence of the action of the fat of the body. The narcotic power of iodoform is ascribed by these observers to the action of iodic acid, which they found produced a similar effect. The remarkable difference between the action of free iodine, which, introduced into the organism, hardly deranges the action of the nervous system, and iodic acid, which has an intense narcotic and toxic effect, is ascribed to the circumstance that free iodine soon combines with the free albumen of the blood or stomach; while iodic acid passes within the tissues, and may liberate free iodine within them, since it readily yields oxygen to oxidisable bodies. Iodate of soda was found to have an antiseptic action on urine, which iodide of sodium does not possess, and this is referred to a gentle oxidation of the colouring matter of the slightly acid urine, in consequence of the contact with the liberated iodic acid hindering the development of the organisms associated with decomposition.

T. G. B. H.—The Judge of a County Court can only reduce the amount of a bill on grounds proved before him in the case.

PUERPERAL FEVER AND SCARLATINA.

To the Editor of THE LANCET.

SIR,—The relations of these two fevers to each other being so obscure, I fancy that any facts with regard to them may be interesting to the profession.

During last year (1877) Exeter was visited with a severe epidemic of scarlatina, the largest number of cases occurring between March and October. Being one of the medical officers of the Public Dispensary, I had an opportunity of witnessing the way in which women in the puerperal state were mixed up with the fever cases. In many houses in which I was attending the children with scarlatina, the mother would perhaps be on the point of being confined. Of course the danger of her "lying-in" in the very centre of the infection was explained to her, but generally with little good resulting. The midwives (so called), who mostly attend these cases, were also frequently cautioned; but I am afraid the medical man who took the trouble was only laughed at behind his back. I could multiply the cases mentioned *ad infinitum*. Of course the medical practitioner's hands were full of cases of scarlatina, and he went in fear and trembling to his midwifery, expecting a case of puerperal fever to crop up sooner or later in his practice, but I am glad to say such was not the case.

Feeling anxious from the reasons stated above to ascertain with certainty the mortality from childbirth during these six months, I went through the whole of the death register for that time (March and October), and there were only two cases of death—one returned "septicæmia," and the other a case attended by a midwife, and which died from "flooding." I think this a remarkable circumstance, considering the way the poorer classes were exposed to infection.

I have recorded the above facts because a good deal has been said with regard to infection being carried by the medical attendant.

Yours faithfully,

Exeter, May 13th, 1878. CHAS. E. BELL.

F. L. S.—It would be better to write direct to the Clerk of the Visiting Committee of the asylum, as the conditions will be found to differ in several counties.

Mr. Gurdon.—The rules governing the payment of fees of medical officers, so far as they were settled by authority, will be found in the regulations relating to emergencies.

Hygiene.—Ascot, Bagshot, Malvern, or Buxton.

SALICYLIC ACID AS A TOPICAL REMEDY IN DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—A short time ago I was called to see a case of rather severe diphtheria. I found the tonsils considerably swollen, and entirely covered with the ashy-grey patches of diphtheritic exudation. I applied freely a solution of salicylic acid; but the solution I used was very much stronger than that usually recommended—viz., 1 in 300. Fifty grains of the acid were rubbed up with six grains of glycerine and two drachms of a concentrated solution of acetate of liquor ammoniæ. A perfectly clear lotion is thus made, which, when applied with a camel-hair brush, gives no pain and causes no irritation. Relief was experienced after one application, and after using it four or five times in the course of two days the tonsils were restored to a healthy condition, and a satisfactory recovery took place.

I am, Sir, yours truly,

Marlborough College, May 20th, 1878. WALTER FERGUS, M.D.

THE RENAL FUNCTION AT BIRTH.

PORAK, in experimenting upon the absorption of iodide of potassium by the placenta, and its elimination in the urine of the new-born infant, has arrived at conclusions which throw some light upon the renal function at birth. He finds that forty minutes after the administration of iodide of potassium to the mother, it may be found in the urine of the new-born infant. Further, that the urine passed some hours after birth contains more of the salt than that passed immediately after birth. This, if confirmed, is an important fact, showing that the eliminatory activity of the kidneys is only developed after birth. It is supported by the fact that in the still-born infant the urine does not yield the reaction. During intra-uterine life, then, it is probable that the placenta acts both as the organ of absorption and of excretion for drugs which temporarily find their way into the fœtal organism. When only twenty-five centigrammes of the iodide are given to a woman in labour, the quantity absorbed by the placenta is small, and its elimination in the urine of the child rapid. When as much as fifty centigrammes, or even one gramme, are given, the elimination by the child is always much slower than that by the mother. In the latter it is effected in thirty hours; in the child it takes as long as four to six days to be completely excreted.

CURARA.

To the Editor of THE LANCET.

SIR,—Noticing in the annotations of THE LANCET, dated 30th March, that the trial of curara, or urari (the latter a Tupi word, signifying poison), is recommended as a cure for hydrophobia, a few words on the subject from one who has seen the poison extensively made use of for hunting purposes in the regions where it is produced may perhaps be of interest.

In witnessing the death of animals by means of this poison, it always struck me that in cases of violent muscular contractions caused by hydrophobia or strychnine, it would act, if not as an antidote, at least as a powerful antispasmodic. Great caution, of course, is necessary in using a drug like urari, and particularly beforehand in determining its quality and condition; for it varies much, and that prepared by some tribes is far more efficacious than that of others. Further, each brew of poison of any particular tribe may differ one from another in strength, both immediately after its manufacture and afterwards, according to the time it may have been kept.

On the north bank of the Maranon and Upper Solimoens the poison most sought for by Indians higher up the affluents, who do not prepare it themselves, is that of the Ticunas (by which name alone it is known on the Pastassa and Napo), the Yahuas and Oregones of the Ica, and the Cotos and Tutapishcos of the Napo, the three first-mentioned tribes supplying by far the larger quantity. The poison of Lamas is also imported from the main stream by the Jivaros and Napo Indians, but, being very inferior, is only used mixed with Ticuna.

The best quality of urari can be kept open in the damp hot climate of the Amazon valley for two or three years without losing its efficacy; but an inferior quality, and especially the Lamas, soon degenerates.

The means employed by some Putumayo tribes to test the poison is to try its efficacy on the frog, and if it causes death in this cold-blooded reptile its virtue is unquestionable. Amongst several other tribes, those men who kill most toucans are considered generally to be the possessors of the best poison, and are in consequence the most acceptable as husbands for the fair sex; but this test I do not think a reliable one, as killing toucans above any other birds I believe consists much more in the skill of the hunter than the absolute quality of the poison. As a rule, Indians are very good judges of urari, as they are of steel, merely by sight. The Ticuna, Yahua, Oregon, Coto, and Tutapishco poison—indeed I believe all excepting the Lamas—is invariably put up in little clay pots; the latter in bamboo-tubes of seven to nine inches in length. When the former description becomes hard and dry, the pot is placed in a water-bath, but no water is poured in it.

Urari taken internally—of course in very small doses—is not considered harmful, and I myself have frequently eaten birds and other game killed by its means, without experiencing any unusual sensations whatsoever. By some Indians common salt, if administered speedily, is said to be an antidote; but I cannot vouch for this, and have only heard it frequently asserted in reference to monkeys. Birds, with their rapid circulation, are past cure immediately after inoculation.

To anyone desirous of procuring good poison, I should recommend application to the English Consul at Pará or, better, Iquitos, with the request that the article be if possible purchased at Lareto or Tabatinga.

Yours &c.,

Calcutta, April 22nd, 1878. ALFRED SIMSON.

J. G. A.—Apply to the Justices for the fee for examining a person alleged to be of unsound mind; but matters of this nature should be arranged at the time. As a rule, the magistrate's clerk pays, or, in the case of a pauper, the relieving officer.

DUTIES OF VACCINATION OFFICERS.

To the Editor of THE LANCET.

SIR,—Will you or any of your readers kindly inform me if the duties of a vaccination officer require him to attend at the vaccination stations to see if the public vaccinator is in attendance, and also to be at the station when vaccination is performed, and to make any remarks, as for instance, that he considers a child a healthy subject to take lymph from. I know of an instance where a public vaccinator resigned his appointment rather than be subjected to any annoyance of that kind. I may add that I always attend the stations regularly.

Your obedient servant,

Kingsbridge, Devon, May 14th, 1878. PUBLIC VACCINATOR.

THE SALE OF FOOD AND DRUGS ACT.

IN a paper lately read before the Society of Public Analysts by Mr. Wynter Blyth on the Amendment of the Sale of Food and Drugs Act, it was contended that the present system of reference from one analyst to another was in the highest degree unsatisfactory, and susceptible of abuses. As is generally known, the Court of Appeal, in cases of disputed examinations, are the laboratory officials at Somerset House. Mr. Blyth proposes that the analysis of all adulterated samples should be made by two independent analysts, the local analyst and a referee, and that no charge should be heard or summons granted unless supported by a joint certificate. Details of the system advocated are sketched by the author, who appears confident that it will meet the views of the majority of food analysts.

SUPPURATIVE NEPHRITIS TREATED WITH CARBOLIC ACID; CURE.

To the Editor of THE LANCET.

SIR,—In the beginning of October I was called to see a woman, who said that for some time she had suffered from a pain over the region of the right kidney, along the course of the ureter and down the leg. The pain had been bearable until the last day or two, when she was compelled to ask advice. Her appetite was impaired. She had a frequent desire to micturate, but only a very small quantity passed at a time. The bowels were costive, and she frequently felt colicky pains. Her complexion was sallow, with occasional flushings. She seemed rapidly wasting away; the least exertion was irksome, and a feeling of faintness frequently came over her. She became much depressed in spirits, and said she was sure not to recover. On examining her urine, I found no albumen, but pus-cells crowded the field of the microscope. As recommended by Dr. Grainger Stewart (*Edinburgh Medical Journal*, August, 1864), I gave tonics and hæmatic medicines, regulating the bowels by compound jalap powder and podophyllin, and nutritive food in the forms best suited to the taste and digestion. Under this treatment she made no progress; in fact, got weaker. So, arguing that an antiseptic treatment prevented wasting externally, why should it not do so internally, I determined to try carbolic acid. I commenced by giving it in one-minim doses suspended in mucilage and syrup three times daily, increasing the dose after a few days to two minims every six hours, at the same time regulating the bowels by jalapine powders, and putting her on a milk diet. I was glad to notice that gradually but surely the pus-cells became fewer as the odour of carbolic acid became stronger in the urine, and in the course of a fortnight entirely disappeared. The desire to micturate was less frequent, and the quantity increased, and the pain entirely left. Fish diet was now ordered, alternately at pleasure with fowl or rabbit. The patient rapidly regained strength, the sallow complexion gave place to a healthy hue, and now she is quite well, and equal to her arduous duties in a factory.

I record this case, hoping that carbolic acid or some other antiseptic may come into more general use in the treatment of internal disease where there is a tendency to form pus. It might, I should think, be advantageously employed by inhalation in advanced phthisis or pneumonia. It seems to pass through the system very rapidly, as in the case recorded its odour was distinctly perceived in the urine after a very few doses.

Yours &c.,

Pathhead, Fife, May, 1875. J. LINDSAY PORTEOUS, Physician, &c.

B. S. L.—We cannot insert the letter. The case does not strike us as obscure or exceptional. Our correspondent should recur to the treatment he has not exhausted.

Tyro.—1. Apply to the Secretary of the Medical Faculty of the University.—2. Guy and Ferrier's book on Forensic Medicine.—3. Messrs. Churchill's list.

Mr. Philips.—Declined, with thanks.

TREATMENT OF CHARBON.

To the Editor of THE LANCET.

SIR,—Having been struck with the fatality nearly always attending cases of malignant pustule or charbon at home and abroad, I think the following statement of a successful mode of treatment adopted in a country where the disease in certain seasons is not far from common will prove of interest and value to the profession. It consists simply in free applications to the pustule of a strong tincture of iodine, and the effect observed is really marvellous, all acute inflammatory action subsiding, and the patient recovering generally in a few days. In a few weeks I witnessed at the hospital here four successive cases treated thus successfully. Two had pustules on the cheek, one on the chin, and the other on the wrist. They were all in young and middle-aged men. The chin case was a severe one, the patient having high fever and delirium, and the pustule presenting a very ugly appearance. Tincture of iodine was freely applied, and, much to my surprise, I found this man on the third day sitting up and preparing to go home. The place of the pustule was occupied by a dry, black eschar, the size of a fourpenny-piece (the usual appearance), and there existed a large amount of hard infiltration of the tissues of the chin, cheek, and submaxillary region, the skin being immovable over the jaw. Dr. Miguel Barcellos, for many years chief surgeon of the hospital, tells me he has never employed any other treatment, and that it invariably proves successful. He attributes its curative action to the cauterising power of the iodine; if it were so, however, the more powerful escharotics would answer as well, but I have seen them always fail. Probably the antiseptic property of the iodine has a better claim.

I may state also that the theory of the production of this malady is by the means of flies, which carry the virus from dead cattle to man.

I remain, Sir, yours truly,

W. ROMANO, M.D., M.R.C.S. Eng., &c.

Pelotas, Rio Grande do Sul, Brazil, March 28th, 1878.

"PLAGUE ON BOARD SHIP."

UNDER this heading in the *Shipping Gazette* is given a somewhat elaborate account of an outbreak of sickness that occurred between Sumatra and the Cape on board a vessel laden with green Java coffee. Virulent headache, vomiting, and purging of blood; mouth, lips, throat, and tongue covered with a black fur, and cramps, were the chief symptoms. One or two cases ended fatally. All the crew were more or less affected, and no definite improvement took place in any of the cases until they were moved to, and slept on, the upper deck, or at all events from the immediate vicinity of the cargo. It would be interesting to know if green coffee in bulk exercises any deleterious influence, and, if so, what is its exact nature.

LIGHT READING FOR THE IN-PATIENTS OF THE LONDON HOSPITALS.

To the Editor of THE LANCET.

SIR,—After offering up my petitions, not altogether unheard or unheeded, at the shrines of the humbler divinities of the press—humbler, that is, and far less influential in all that concerns the well-being in body and mind of the sick and suffering,—may I approach the altar of the "Di majorum gentium" in your person?

I would fain, through your influence, make it known that since I entered as a student at a London hospital, about a year ago, I have been enabled by the contributions of old friends, old pupils, and outsiders, to collect, and to give to some ten or twelve London hospitals, not less than 5000 to 6000 amusing books. These consist of works of unobjectionable and innocuous fiction, tales, history, travels, and so forth, and of the best of our leading serials and magazines. In only three or four of the London hospitals has any objection been made by the chaplains towards receiving any but *religious* books. I need hardly say that, as I am a clerk in holy orders, as well as, for my own pleasure, a humble medical student, I have been especially careful *not* to take to any hospital works of the sensational class, such as Dumas', Eugène Sue's, and so forth. A few days ago I wrote to Mr. Fowler Buxton, the treasurer of the largest of the London hospitals, to inquire "*if his* chaplain had any objection to receive such light reading as Scott, Dickens, Trollope, and the leading magazines, for the use of his patients." This morning I had the pleasure of hearing from him, that "the chaplain of the London Hospital cordially accepts your offer of books and pamphlets for the sick and wounded there." On Wednesday I propose making a "hadj" to Whitechapel, and taking to the London Hospital the last fifty to a hundred books of the kind I have mentioned. But what are they among so many? London Hospital, I think, makes up nearly 1000 beds. All the scrap-books, too, some thirty or forty, sent me for the sick and suffering "mites of humanity," are already given away to other hospitals. Can I say more? "Verbum non amplius addam," except that "Oliver asks for more," and hopes, through your influence, to get more sent to me, either here, or to the care of the porter of Westminster Hospital.

Permit me to be, in case you make room for this letter,

Your paullo-post-future much obliged and
Most obedient humble servant,
DAWSON W. TURNER, D.C.L.

13, Salisbury-street, W.C., May, 1878.

Mr. John W. Teale.—The point raised by our correspondent is new as far as we know, and very interesting. If he practises as a pure consultant, and the message for him was addressed to him in that capacity, then we think a court of law would recognise his claim, but not otherwise. In the latter case he would be held to have declined giving his services. Whatever our correspondent's legal claim, he acted with great propriety.

CARBOLIC ACID IN WHOOPING-COUGH.

To the Editor of THE LANCET.

SIR,—Might I through your columns direct the attention of the profession to the use of carbolic acid in the treatment of whooping-cough? Having treated nine cases with it successfully in the manner immediately to be described, I take the liberty of forwarding an outline of one or two cases.

CASE 1.—An infant, aged three months, ill for several days with severe catarrh. When called in, a well-marked and characteristic whoop had been present for three days. As a rule, the paroxysms occurred two or three times within the hour, and were aggravated by crying. Towards evening the symptoms were most severe. The epiglottic spasm was so bad that the little sufferer became almost asphyxiated, lying pale and exhausted when it terminated.

Treatment.—Carbolic acid in quarter-grain doses was administered in glycerine every two hours; cloths wrung out of carbolic-acid solution (1 in 100) were placed around its cot and distributed about the room. At the end of twenty-four hours the symptoms were much less severe; by forty-eight hours the paroxysms occurred at intervals of three or four hours only. The medicine was given now every four hours, a little stimulant applied to the back and chest, and brandy allowed in five-drop doses from time to time; the diet to consist of cow's milk and water, one of the former to two of the latter (the infant being hand-fed). By the sixth day there was no whoop, and by the twelfth the cough had entirely disappeared.

CASE 2.—A girl, aged four years, had one-grain doses administered in glycerine every four hours. The whoop disappeared in four days, and the cough a week later.

CASE 3.—A single man, aged twenty. Was very bad; vomited everything he took. Two-grain doses were given every four hours. He recovered in a fortnight.

The clinical history of the remaining cases presents no new features, all of them terminating equally well.

I am, Sir, your obedient servant,
GEO. W. COLE, L.R.C.P. Ed. &c.

Taranaki, New Zealand, March 4th, 1878.

FACTORY INSPECTION.

THE last Reports of the Inspectors of Factories contain, under the heading of "Surgical Certificates," the following curious paragraph by Mr. Robert Baker:—"As the Bill has passed through Committee, though a larger number of certificates may be required in consequence of small workshops being added to factories, yet the examination of young children, however small in number, for passes to work will be on health account a consideration of importance, and ought not to be performed in a slight or perfunctory manner; *for it must never be supposed by the examined that their examiners were not accustomed to the work, or not entitled to their respect.*" The italics are our own. Factory surgeons are evidently to understand that the grimy little lads who are brought to them for certificates are to be treated with the utmost deference.

H. B. K.—The new edition has not been received, and we do not know the name of its editor.

EPIDEMIC DIPHTHERIA IN WALES.

To the Editor of THE LANCET.

SIR,—Under the above heading in your last issue I find it stated that "In Cardiganshire no less than 51 deaths from diphtheria were registered during the last quarter, and that, so far as may be ascertained from the Registrar-General's Quarterly Return, there appear to have been at least three distinct centres of infection in Cardiganshire, of which one I Aberystwith." Now, this appalling publication caused me forthwith to investigate the matter. On referring to the register, I find only one case of diphtheria entered for Aberystwith, and that case was brought into the town from a neighbouring village, situated over a mile off, in which, as well as in other villages four and five miles off, there were a number of cases; but it is certainly not fair to saddle Aberystwith, which is one of the best-drained towns in the United Kingdom, with the faults and misfortunes of filthy country villages, which happen, although miles off, to be within the district. As proof of the salubrity and immunity of Aberystwith from disease, I adduce the death-rate, which during the summer quarter last year, when the town was full of visitors, did not average 8 per 1000 per annum, and, when coupled with the district, it only amounted to 15·98 per 1000. Still it proves how very detrimental and unjust it is to include filthy district villages in recording the death-rate of watering-places.

Trusting you will give this publication, not only to disabuse the public mind of the impression that Aberystwith has been a centre of infection for diphtheria, but, on the contrary, that it is enjoying a complete immunity from that disease, as well as other infectious diseases,

I am, Sir, yours &c.,
Aberystwith, May 21st, 1878. T. D. HARRIES, F.R.C.S.

THE ONE-PORTAL SYSTEM.

To the Editor of THE LANCET.

SIR,—I am glad to see the subject of the title to be given to those who obtain admission to the profession by the "one-portal system" brought forward by a letter in your last issue, signed by "A Graduate." The proposal under the English Conjoint Scheme, to give to everyone who qualified at their examination three diplomas, conferring three titles (medical), and the privilege of placing eleven letters after their names (M.R.C.S., L.R.C.P., L.S.A.), was absurd, and hardly fair to those who had had to pass three examinations to obtain the same distinction, though under the circumstances I suppose it was inevitable. However, as there is a Medical Bill before Parliament, now is the most opportune moment for the discussion and settlement of this point. Your correspondent proposes "Lic. Med.," but this might clash with L.M. diploma. Is there any objection to the use of the name by which we already speak of those who practise, and are presumably qualified to practise, all branches of our profession as "general practitioners"? And would not the letters "G.P." be the most suitable for indicating their attainments?

Yours &c.,
May, 1878. ANOTHER GRADUATE.

INVALID WHEELED-CHAIR AND CARRIAGE SOCIETY.

To the Editor of THE LANCET.

SIR,—If you think the formation of a Society as above to furnish the poor with these useful articles, either gratis or at very low rates of hire, is feasible, kindly insert this, and some of your readers having the gift of organization will perhaps take up the hint. No comment of mine is required as to the boon such a Society would be to thousands in London.

Yours &c.,
London, May 18th, 1878. W. J.

EXTRAORDINARY PRECOCITY.

To the Editor of THE LANCET.

SIR,—I extract the following from a letter which I have received from Dr. Cornell, a former pupil, and now a practitioner of Farmersville, a rural village in this Province, Ontario. I have entire reliance on his veracity. I think the matter may be of sufficient interest to deserve insertion in THE LANCET:—

"The child, a female, is two years and three months old. I was consulted by the mother, who supposed it had some mammary disease, there being a symmetrical enlargement of both glands. Struck by their appearance, I had the child stripped, and found what appeared to be a fully-developed woman! Abundance of hair on the pubes and in the axillæ. The genital organs, as well as the mammæ above mentioned, seemed to be fully developed. For the last three months the child had menstruated regularly three days every four weeks. She was flushed, and complained of headache and pain in back and thighs while menstruating. She weighed forty-eight pounds."

Faithfully yours,
Kingston, Canada, May 6th, 1878. HORATIO YATES, M.D.

TREATMENT OF INCONTINENCE OF URINE.

To the Editor of THE LANCET.

SIR,—Your correspondent, Dr. M'Intyre, in your issue of May 4th, mentions a method he has successfully employed for checking incontinence of urine in children. Happening to read it, I determined to put his method in practice as soon as I could. A few days back, calling on a little boy who had hitherto been incurable, and who, like Dr. M'Intyre's patient, resisted means moral, physical, and medicinal to cure him, I asked his mother to abstain from a meat diet for him in future. After some persuasion she consented to do so. Calling at the house two days afterwards I found that he had almost instantaneously "left off." Thinking the method worthy of another trial, I two or three days ago tried the experiment on a boy aged ten, who has been incurable for some years (I may add that the boy himself has endeavoured to check the habit by tying a string round the penis at night, but all to no purpose). On visiting him yesterday I found him no better, but elicited on inquiry that the mother, not wishing "to deprive him altogether of meat," has given him beef-tea. I promptly ordered this to be stopped, and have little doubt that by this time he is quite recovered.

I am, Sir, yours &c.,
F. N. GREENWOOD, M.R.C.S.

St. Bartholomew's Hospital, May 15th, 1878.

To the Editor of THE LANCET.

SIR,—A few weeks ago Mr. Huxley, of Cavendish-street, offered to supply any of your readers who would apply to him with an arrangement of an elastic band that he had designed for the prevention of incontinence of urine at night. The idea is not new; indeed I had tried it on several patients some years ago, but had invariably failed from the inability to fix the elastic with proper tension round the penis. I find Mr. Huxley's arrangement meets most of the difficulties, and in one case that had defied treatment for many years it has perfectly succeeded. It is, however, I think, capable of further improvement, the desideratum being an elastic band of easy self-application, exerting moderate and *adjustable* pressure, and not likely to be removed by the patient during sleep.

Mr. Huxley's arrangement fulfils most of these requirements, but the pressure cannot be altered. If he would substitute a sliding buckle for the hook-and-eye, I consider it would be an improvement; but even as it is now constructed it will, I think, be found very useful for what most of us have probably found most unsatisfactory cases.

Yours &c.,
Chesterfield, May, 1878. E. M. WRENCH, F.R.C.S.

ERRATA.—In Mr. Harry Leach's article on South Africa as a Resort for Pulmonary Invalids, in our last issue (p. 716, col. 1), Bloemfontein should have been credited with from 3000 to 4000, instead of 2000 inhabitants. — In the report of the case of strangulated hernia at the North Staffordshire Infirmary, page 718, 2nd col., line 11, for "the bowels remain inverted," read "the bowels remain *inactive*."

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Barnes, London; Mr. J. Adams, London; Mr. Francis Mason, London; Sir D. Corrigan, Dublin; Dr. A. Meadows, London; Dr. Barclay, London; Dr. Fergus, Marlborough; Mr. Gray, London; Mr. Elliot, London; Mr. Hargreaves, Armley; Rev. H. M'Sorley, Tottenham; Mr. Lediard, London; Mr. Howley, St. John's, Newfoundland; Mr. May, Birmingham; Dr. Royle, Greenheys; Mr. R. Atkinson, London; Mr. Abell, Gloucester; Mr. Wildeys, London; Mr. F. Glanville, London; Dr. Bennett, Liverpool; Mr. Frost, London; Dr. Nicholls, Chelmsford; Messrs. Field, London; Mr. Simson, Calcutta; Mr. Smith, Seaforth; Mr. Hookham, Birmingham; Mr. Greenwood, London; Mr. S. Haydon, London; Mr. Gurdon, Hopton; Dr. Craigie, London; Dr. G. Bland, Macclesfield; Mr. J. Philips, London; Mr. C. Williams, Norwich; Dr. Yates, Kingston, Canada; Mr. M'Gill, Leeds; Messrs. Wood and Co., New York; Dr. Hamblin, Adams County, U.S.A.; Mr. White, Corwen; Mr. B. Hill, London; Dr. Sharpe, London; Mr. Jewell, New York; Mr. Marsh, Torquay; Dr. Weston, Birmingham; Dr. Warren, Castle Eden; Mr. J. Galloway, Leeds; Dr. Beach, Clapton; Mr. Wallice; Mr. Harries, Aberystwith; Mr. Baker, Birmingham; Messrs. Horne and Sons, Whitby; Mr. Jones; Dr. Lindop; Dr. H. Harris, Redruth; Dr. Teale, Scarborough; Mr. Akerman; Mr. Mawbey; Mr. Brown; Mr. Sutton; Mr. Sydney; Mr. Davies, Boston, U.S.A.; Dr. Packer, Gloucester; Mr. Gawith; Dr. Kenyon, Chester; Dr. Massiah, Cheadle; Dr. Macrorie; Dr. Leishman, Glasgow; Mr. Harper; Mr. Tendell; Dr. Finniss, Mauritius; H. B. K.; Another Graduate; Public Vaccinator; Bis dat qui Cito; J. V. R. C.; Tyro; W. J.; A Father; Justitia; P. Q.; T. W.; Theta; Delta; J. G. A.; B. S. L.; F. Z. L.; W. W.; M.B. Lond.; W. R. P.; H. H.; Not Specially Unrighteous; Medicus; W.; Anon; R. A.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Coward, Huddersfield; Mr. Fosbroke, Birmingham; Mr. Pughe, Cupar, Fife; Mr. Williamson, Witton Park; Mr. Simmons, Wotton-under-Edge; Mr. Dickson, Buxton; Messrs. Grace, Bristol; Mr. Hall, Salford; Mr. Underhill, Birmingham; Dr. Caithness, Denbigh; Dr. Bryan, Leicester; Mr. Bremner; Dr. Hannah, Ashton; Dr. Hitch; Dr. Brady, Derby; Dr. Rowland, Malvern; Dr. King; Mr. Elliott; Mr. Thomson, Aberdare; Mr. Harvey; Mr. Henderson; Mr. Mackay; H., Lytham; L. R. C.; Chemist, London; Brodie, Woburn; W. H. T.; J. W., York; Practitioner; L.R.C.P.E.; E. W. W.; Alpha, Braintree; F.R.C.S.; M. P. S.; Medicus; R. S.; M.D., Stockport; Alpha, Sheffield; M.D., Guernsey; M.R.C.S.; L. S.; Delta, Shrewsbury; M.D., Manchester; D. W.

United Service Gazette, Western Morning News, Daily Free Press, Luton Reporter, Guy's Hospital Gazette, Vulcan, &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, MAY 23RD, 1878.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 17	29·88	S.W.	59	61	102	69	56	0·05	Overcast
,, 18	29·74	S.	60	62	111	75	58	0·10	Overcast
,, 19	29·90	S.W.	57	63	102	65	57	0·02	Cloudy
,, 20	29·88	N.W.	51	54	82	59	51	0·02	Overcast
,, 21	29·93	W.	45	50	93	59	39	0·21	Cloudy
,, 22	29·99	W.	46	53	93	62	42	0·07	Fine
,, 23	29·52	S.W.	49	51	..	58	47	0·25	Overcast

Medical Diary for the ensuing Week.

Monday, May 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, May 28.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. T. Thiselton Dyer, "On some Points in Vegetable Morphology."
ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Sequel to Mr. Barwell's "Case of Aneurism of the Aorta &c., treated by Double Distal Ligature."—Dr. Vandyke Carter, "On the Spirillum Fever of Bombay, 1877."—And if time: Dr. H. Jones and Mr. H. Page, "On Cases of Intussusception."—Dr. Sémon, "On a Case of Thyrotomy." Dr. Stephen Mackenzie, "On Fatal Purpura following a single Dose of Iodide of Potassium."

Wednesday, May 29.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.

Thursday, May 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Professor Guthrie, "On Molecular Physics: Gases."

Friday, May 31.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Weekly Meeting.—9 P.M. Professor Flower, "On the Native Races of the Pacific Ocean."

Saturday, June 1.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Morley, "On Richard Steele" (additional lecture).

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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